Recession Proof Coal

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OECD economies appear to be on the brink of another recession. Shares are plummeting; currencies and countries are in turmoil; ratings downgrades are a near-weekly event. Yet some commodities are proving remarkably resilient, not least thermal coal. Indian rather than Chinese demand is the driver, while Indonesian talk of a ban on coal with a low calorific value, if implemented, would throw export markets into turmoil.

If the Asian growth story is crucial to understanding oil markets, it is even more fundamental for thermal coal. Asian growth is taken as a constant by analysts. Even with coal in seemingly terminal decline as part of the US and European power mix, bankers Credit Suisse were prepared recently to declare that “any weakness in Atlantic demand conditions, resulting from a US/EU recession, can be readily soaked up by Pacific demand—with India and South East Asian growth and Japanese recovery playing their part alongside Chinese domestic thermal supply constraints.”

This statement assumes that Asian demand for coal is essentially detached from the general economic path of the world economy. It assumes that China can maintain its rapid rate of economic growth, alongside its demand for thermal coal, in the midst of OECD recession, and that India can meet its utility and port development targets. This infrastructure is critical to the country’s ability physically to receive the coal imports it power stations demand. At the same time, there is the return of Japan to the physical coal market to consider, as well as nascent Indonesian plans to regulate the amount of low calorific value coal it is prepared to export. All in, it doesn’t seem a bad call.

Chinese Imports

China’s thermal coal supply picture has altered radically in the last decade from a production base of about 1.4 billion mt in 2002 to output of over 3.3 billion mt in 2010. Despite this growth, it still cannot produce enough, turning to seaborne markets and the two exporting mammoths of Indonesia and Australia in particular to fill the gap. Consumption has grown over the same period from 1.3 billion mt in 2002 to over 3.45 billion mt in 2010. Indeed, as Credit Suisse suggests: “China’s supply constraints are the industry’s ‘unfixable’ decade-long problem.”

This is despite China’s major redevelopment programs, for example the way it has consolidated a sprawling
industry dominated by thousands of undersized coal mines. From 10,000 small mines each producing less than 300,000 mt a year of coal just two or three years ago, the country now has less than 3,000 mines each with a minimum output of 1 million mt/year. This program is set to continue until 2015 when China plans to have ten companies each producing over 1 billion mt/year and a further ten with output in excess of 500 million mt, together accounting for just under two-thirds of domestic output.

The efficiencies this should deliver suggest one means of lessening the country’s import dependence. Imports will continue to play a key role, but runaway growth will be limited by China’s ability to boost domestic output. China has swung from a net exporter of several million tons in 2008 to a net importer of over 100 million mt in 2009 and about 140 million mt in 2010.

But Societe Generale in early October said it believes Chinese coal imports could fall back below 100 million mt in 2012 and could be as low as 90 million mt. This compares with an annualized rate of 156 million mt based on 104 million mt of imports in the year to August. The most recent trade data (September 2011) also shows that China is not immune to the travails of the global economy. Its September trade surplus fell to $14.5 billion from $17.8 billion in August, and while exports remain at a traditional historic high, analysts are suggesting this could be further evidence of a slowing rate of growth.

Barclays Capital suggests that “while demand is likely to be greater than supply in 2012, we do not expect Chinese coal imports to exceed this year’s levels and would also expect a declining trend in overall net imports from here on.” It adds: “While Chinese coal demand is set to continue to experience significant growth (another 300 GW of power generating capacity by 2015), the investment in domestic production and transportation infrastructure could outpace that growth in the coming years. While this is unlikely to shift China from being a net importer, the trend of growth could be reversed over the next couple of years and should stem any future increase in Asian prices.” Barclays does stress that this is a short to medium-term forecast, with the likelihood that Chinese imports will start to increase from mid-decade, but it is interesting that China is not the main motor of Asian coal demand when it comes to the seaborne market.

**Indian Demand**

In contrast, India is beset by domestic production and infrastructural issues. Production is stagnant for the most part and, while there is an abundance of material—the 2009 Geological Survey of India’s coal inventory estimated a 277 billion mt resource—only 40% or 106 billion mt are proven reserves. Alongside quantity, India has quality issues with domestic coal having a lower calorific value than that of major coal exporters like South Africa, Indonesia and Australia. Poor communication between the rail sector and miners, shortages of rail wagons and major delays in granting mining licences means that domestic production is falling well short of target.

Recognizing these problems early on, and the likelihood of dependence on imported coal, the current generation of new power plants have been located at or close to major seaports. Quoting government targets, Standard Chartered suggests that “India hopes to grow its power generation capacity by 14% per annum till 2012, increasing its capacity from 170 GW in 2010 to 220 GW in 2012 (Standard Chartered forecast 198 GW). If India meets even half of its power generation targets, the thermal coal market would face huge problems.”
By the end of the 2011-12 fiscal year, the government expects to add over 14 GW of incremental thermal capacity, much of this coal-fired. For the 2010-11 fiscal year, the target was 13 GW and the success rate was 60%, or 9 GW. Even if below target, this equates to additional thermal coal demand of 40 million mt.

India’s problems have been a long time coming. In late 2010, the Australian Bureau of Agricultural and Resource Economics concluded that: “Assuming India sources 60% of the coal it requires from its own mines, it would still need to build an additional 106 million tons of coal capacity in the next five years. This is double Australia’s planned expansion over the same period and over two-thirds of Indonesia’s planned growth.”

At the time, India’s state-led initiatives to acquire properties overseas were going badly. Despite a huge war chest, India was being beaten to the punch every time by a swifter moving, usually Chinese-led consortium. However, that has changed with major private companies like Adani, GVK and Lanco Infratech seizing the initiative and committing to invest tens of billions of dollars in Australian and Indonesian projects at various stages of development. This investment is crucial to delivering the coal imports India needs.

Adani’s acquisition of a 99-year lease for the Australian port of Abbot Point for $2 billion in May, in addition to the $10 billion laid out for its Carmichael Coal Mine and Rail project, was a huge leap forward. Industry experts are also delighted that it is showing its state-owned and private consortia compatriots the way forward by adopting an integrated model, retaining control of all stages of the logistics chain from mine to port to power plant. Adani even owns the Capesize vessels on which the coal will be transported to Mundra on India’s south west coast.

The company hopes to complete all the paperwork for the Carmichael mine deal by end-2012 in order to begin operations in 2014. In ten years time, this should be a 60 million mt/year mine; output until then is estimated at 7-8 million mt/year. The project is expected to have a total mine life of 150 years.

GVK Power and Infrastructure consortium have also hit the headlines with a $1.3 billion investment in the Hancock group. The deal involves three thermal mines in Australia’s Galilee basin and a rail and port project. Recent indications from the company suggest a total spend of $6 to 7 billion over the lifetime of the project. GVK is looking to sell off minority stakes in some of its units to offset some of the costs of the acquisition. Like Adani, the mines are expected to come online in 2014, producing about 30 million mt of coal a year within a short period of time.

Meanwhile, Lanco Infratech has invested around $750 million to secure access to export-grade thermal coal in Western Australia with the acquisition of Griffin Coal. It has run into some local trouble recently with its decision to conclude a unilateral coal supply contract with the Bluewaters power plant. The office of Western Australia premier Collin Barnett has said it could withhold export licenses, if Lanco Infratech fails to live up to its promises.

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Mundra port and its associated special economic development zone are majority owned by Adani. The port, the largest privately-operated port in India, is expected to handle around 20 million mt of coal imports this year, up 30% on 2010 figures. An estimated 9 GW of additional power capacity is slated to come on-line around Mundra over the next couple of years, providing the final link in the chain. India continues to produce about 10% less electricity...
Indonesian Coal Ban

Adani is also investing $1.6 billion in a port and rail project in Indonesia, where the current topic of debate is the possible implementation of an export ban on thermal coal with a low heating value. The Indonesian energy authorities are still in the process of consulting coal market players regarding a proposed regulation requiring mine owners to improve the value of their coal through upgrading technologies; the regulation could ultimately result in a ban on the export of coal below a certain heating value.

In September, ASX-listed Realm Resources said that the Indonesian energy ministry had circulated an advanced draft of a proposed decree on “Value Added Upgrading of Minerals and Coal through Processing and Refining Activities.” In its current form, the proposed regulation states that by January 2014 it will no longer be possible to export Indonesian coal with a calorific value of 5,100 kcal/kg GAD. This ban could remove in the region of 120-130 million mt of coal a year from the market, roughly half the country’s total exports, at least temporarily throwing the entire seaborne trade into disarray.

It would also, of course, present opportunities for producers based elsewhere. Investment bank Dahlman Rose & Co. said in a late third-quarter report that: “buyers looking to replace the lower Btu [Indonesian] coal could turn to the [US-based] Powder River Basin (8,400 to 8,800 Btu/lb), which could begin to bring on export terminal capacity in that time frame.”

Additionally, Dahlman Rose “expects South African coal to be bid away to Asia even more, raising the price in the Atlantic Basin and benefitting exporters from both the Appalachian regions (11,500 to 13,000 Btu/lb) as well as the Illinois Basin (10,500 to 11,500 Btu/lb).” This heating value would be more akin to higher quality Australian coal. The producers that could benefit from the Powder River Basin perspective could be Arch Coal, Cloud Peak Energy and Peabody Energy.

From the US east coast, Alpha Natural Resources and CONSOL Energy both have export terminal capacity advantages, with Dahlman Rose adding that the latter also has a “low production cost position.” Additional freight costs must be factored in and it will take longer for vessels to reach their destination, but set-tonnage contracts pegged to a daily thermal coal assessment process could improve the financial risk management. For now though, Indonesian coal producers are lobbying the government to implement any future ban in stages and for a staggered introduction of the coal upgrading requirement.

Japan’s Return

Adding to the supply-demand pressure over the next six to twelve months will be Japan’s return to the market as its coal-fired plants ramp back up to capacity after the natural disaster it suffered in March 2011. A late August report from Deutsche Bank estimates that the short-term fuel replacement mix could see a nuclear-compensation factor comprising 59% LNG and 35% coal, with the remainder consisting of heavy fuel oil and crude oil.

Deutsche Bank estimates an additional consumption requirement of 1.6 million mt/month of coal based on a worst-case scenario of the affected nuclear reactors remaining offline, although it does indicate that the full realization of this scenario is unlikely. From a seaborne or total global production stand-point, even an additional Japanese utility requirement of 12-15 million mt in the short term would place further pressure on Asia’s supply side.