

BHP Billiton: Iron Ore for China^(c)

In 2003, China became the world's largest importer of iron ore. Between 2004 and 2005, China's steel production increased from by 26% from 270 to 340 million metric tons, or about one-third of world production. Fueled by rapid economic growth, production was projected to increase by a further 9% to 370 million tons in 2006.

Iron ore is graded as fine or lump according to whether the majority of individual particles have diameter of less or more than 4.75 millimeters. A third grade – pellets – is fined-grained concentrate rolled into balls with diameter of 9.55 to 16.0 millimeters. Lump ore and pellets can be charged directly to a blast furnace. However, fine ore must be sintered before being charged to the blast furnace, hence are more costly to use.

Three companies – Australia's BHP Billiton and Rio Tinto, and Brazil's Companhia Vale do Rio Doce (CVRD) – control over 70 percent of worldwide exports of iron ore.

By 2005, China purchased over 40% of world iron ore imports. Europe and Japan bought less than 25% and 20% respectively. In 2004, the principal sources of China's iron ore imports were Australia (78 million tons), India (50 million tons), Brazil (46 million tons), and South Africa (11 million tons). China imported a total of 5.7 million from other sources including Canada, Russia, and the USA. In 2005, China's imports comprised 71% fine ore, 19% pellets, and 10% lumps.

China's imports of iron ore from India have been so large that Indian steel manufacturers lobbied their government to limit exports to China.

To meet the burgeoning demand from China, BHP Billiton increased production by 45% from 72 million tons to about 105 million tons in just three years, 2002-05. Smaller Australian mining companies have also increased production capacity. These include Atlas Iron Ore, Fortescue Metals Group, Gindalbie Metals, Midwest Iron and Steel, Resource Mining Corporation, Golden West Resources, and Polaris.

^(c) 2006, I.P.L. Png and Zhigang Tao. This case is based in part on "Chinese steel mills reject BHP iron-ore premiums", *Asian Wall Street Journal*, April 5, 2005, M3; "Australia will stay out of BHP's talks in China", *Asian Wall Street Journal*, April 6, 2005, A3; "China balks at BHP ore prices", *International Herald Tribune*, April 12, 2005, B4; "BHP relents on jump in price of iron ore", *International Herald Tribune*, April 14, 2005, 13; Peter Toth, BHP Billiton, China Raw Materials Conference, October 24, 2005; "BHP, Rio Tinto refuse comment on China ore threats", ABC.net, March 8, 2006"; "Steelmakers face higher costs", *South China Morning Post*, May 17, 2006, B2. The authors thank Renata Rodrigues Fortes for helpful discussions.

The big three iron ore producers have entered into long-term supply contracts with major steel manufacturers. These contracts might specify minimum quantities that the ore producer must sell and the manufacturer must purchase. Steel manufacturers buy on a free-on-board (FOB) basis. FOB buyers pay for freight.

These contracts further specify that prices must be negotiated on an annual basis. European steel manufacturers buy relatively more fine ore. Prices for fine ore set the benchmark for prices for lump ore and pellets.

The China Iron and Steel Association represents sixteen of China's major steel manufacturers in negotiations with iron ore producers. The Association includes Baoshan Iron and Steel, which imports all of its iron ore, Maanshan Iron and Steel, which imports 75% of its iron ore, Chongqing Iron and Steel, which imports 60%, and Angang New Steel, which imports relatively little iron ore.

In late 2004, Nippon Steel of Japan agreed a substantial price increase with CVRD. Subsequently, CVRD and Rio Tinto negotiated a sharp 71.5% price increase with the China Iron and Steel Association for shipments in 2005-06.

BHP Billiton calculated that the freight cost of shipping iron ore from Australia to China was about US\$20 per ton less than shipping from Brazil. Accordingly, BHP sought a US\$7.50 to \$10 per ton surcharge from the China Iron and Steel Association *in addition* to the 71.5% price increase. The Association rejected the surcharge as unreasonable and against international practice.

China's Ministry of Foreign Affairs declined to intervene, saying that negotiations between BHP and Chinese steel manufacturers were a commercial issue. However, China's Deputy Commerce Minister Ma Xiuhong remarked that BHP's surcharge would damage long-term trade relations between China and Australia.

Meeting with resistance from the China Iron and Steel Association, BHP dropped its demand for the surcharge. However, Mr Graeme Hunt, President of BHP Billiton Iron Ore, said that would raise the issue in the following year.

Subsequently, BHP Billiton announced an 89% jump in profit to \$6.4 billion for the year to June 2005, which was a record for an Australian company. China sales accounted for 12.6% of total revenue. BHP agreed to co-sponsor the 2008 Beijing Olympic Games by contributing money as well as the gold, silver and bronze for medals. Mr Clinton Dines, President of BHP in China, said that the

co-sponsorship would not dissuade BHP from re-opening discussions on the surcharge.¹

Meanwhile, Rio Tinto's profit increased 58% from \$3.3 billion in 2004 to a record \$5.2 billion in 2005. China sales accounted for 15% of total revenue.²

¹ "Australian iron giant will co-sponsor Beijing Games," *International Herald Tribune*, December 9, 2005, 13.

² "China pushes Rio profit to record," *International Herald Tribune*, February 3, 2006.

Discussion questions

1. Why would steel manufacturers and iron ore suppliers agree to minimum purchases/sales in long-term contracts?
2. What advantage(s) would BHP Billiton gain by pricing to steel manufacturers on a CIF (cost insurance and freight) rather than FOB basis?
3. What advantage(s) do Chinese steel manufacturers gain by negotiating jointly with iron ore suppliers?
4. How can Chinese steel manufacturers improve their bargaining position relative to BHP Billiton?
5. Should BHP seek the surcharge in the 2006-07 price negotiations?