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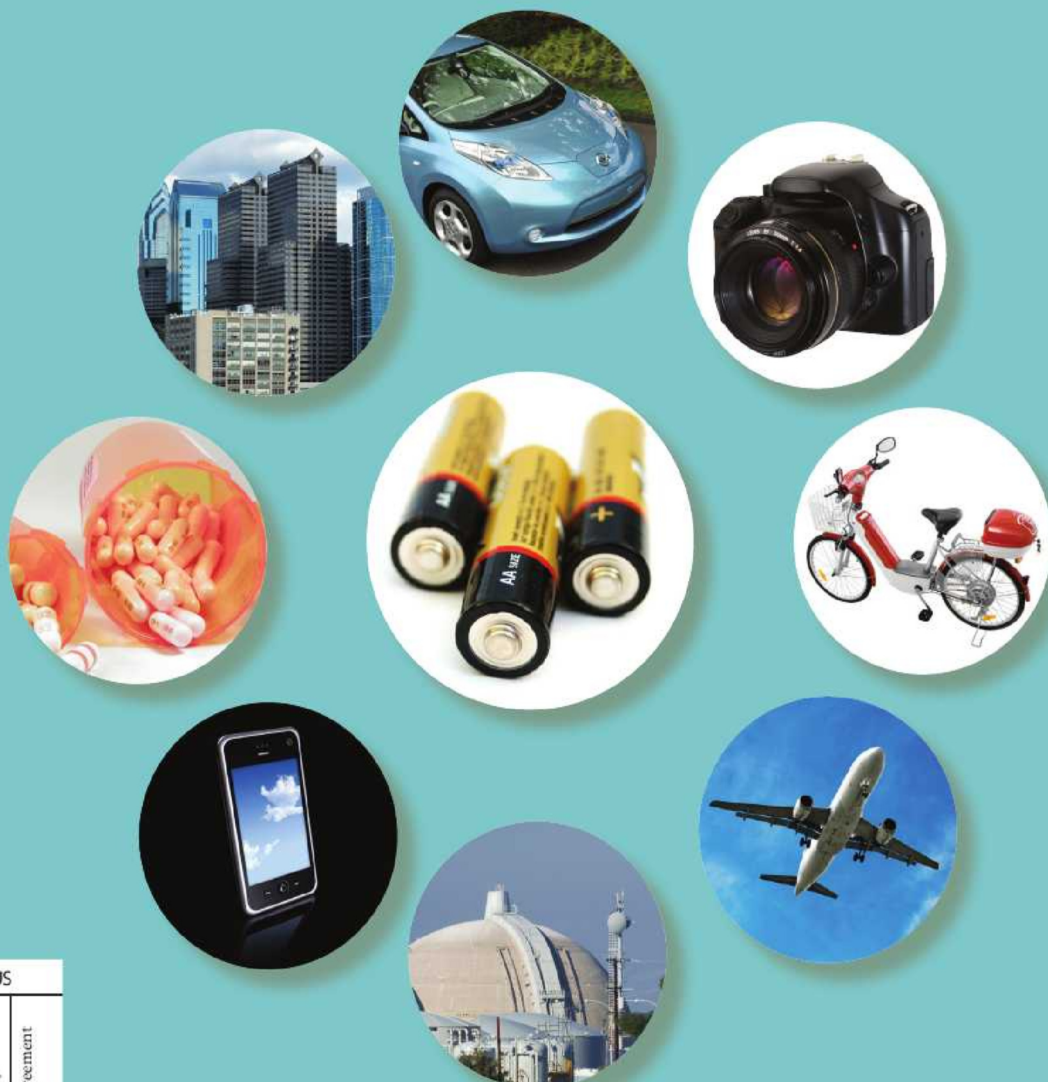

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Global iron ore industry review

by Sandy Chim

The world has witnessed some interesting developments in the global iron ore market in recent months. The market has rebounded from the lows it hit during the financial crisis to new historic highs due to China's strong and speedy recovery which made up much of the volume in 2009. China gobbled up ~70%, or 628 metric tonnes (mt) of the 918 mt of the total seaborne market, leaving the country more vulnerable to supply issues. There are three majors who supply approximately 70% to the iron ore market.

While other economies are still recovering, China continues to import at high levels and the market has become so tight that the FOB spot price for iron ore fines peaked in late April at ~US $160/tonne (based on spot price CIF China of ~US $185/t per The Steel Index at less the spot freight of ~US $25/t from Brazil to China), surpassing even the pre-crisis level of 2008 by a huge margin.

The strength of this sellers' market gave major producers an opportunity to maximize their economic position by breaking away from the 40-year old annual benchmark price system and shifting to an indexed based pricing mechanism on a quarterly basis. This new fundamental change will add a great deal of volatility to the global steel industry which had been used to a stable environment provided by annual contracts. This new pricing mechanism will certainly be felt in the downstream building and construction sectors.

THE CHINA INFLUENCE

Indisputably, the market is experiencing these unprecedented developments because of China. After 30 years of industrialization, China is set to become the second largest economy in the world with US $5.2 trillion GDP this year, surpassing Japan. Yet, in terms of income per capita, China is less than 10% of that of Japan. If China can maintain its target GDP growth of 8% per year, in about 30 years, it will be as industrialized as Japan.

It is the magic of China's 8%+ GDP annual growth over the years that generated the continuous fixed asset investments, creating the insatiable demand for iron ore. However, it is not easy to predict exactly what will happen as China has surprised us in the past with its stellar growth.

Though it buys so much iron ore from the rest of the world, China is actually already the world's largest iron ore producing country by far (close to 900 mt crude ore in 2009) which meets only a small portion of its demand. Its domestic supply, 10 years ago having a market share of two-thirds, has declined to only one-third in the face of deteriorating grade and high mining costs since there are many small underground mines in China. China's dependency on imports is certain and increasing; it will continue to be the main market driver for years to come.

FUTURE OF THE MARKET – VOLUME AND PRICE SUSTAINABILITY

It is generally believed that by 2015 the global seaborne market will grow by 50% (with 75% due to China) or ~500mtpa to

China Iron Ore Demand & Crude Steel Output

Year	Crude Steel output (mt)	Iron Ore Demand (mt): Domestic crude	Growth rate of domestic	[1]Domestic concentrate	Import	Growth rate of import	Total input to furnace
2000	128	223	66%	136	70 34%		206 100%
2001	149	217	-2.7%	148	92	31.4%	240
2002	178	224	3.2%	176	111	20.7%	287
2003	219	261	16.5%	203	148	33.3%	351
2004	271	310	18.8%	229	208	40.5%	437
2005	353	420	35.5% 51%	294	275 49%	32.2%	569 100%
2006	423	599	42.6%	356	326	18.5%	682
2007	489	707	18.0%	404	384	17.8%	788
2008	500	824	16.5%	363	444	15.6%	806
2009	568	880	6.8%	288	628	41.4%	916
2010E	590-610	920	4.5% 34%	327	640 66%	1.9%	967 100%

[1] Imputed value estimated by Century Iron Ore Group

Source: World Steel *Association*, USGS

Mix of domestic/import of 66/34 in 2000 is changed to 30/70 in 2009 & 34/66 in 2010E
→ Increasing dependency on import iron ore
→ Domestic ore grade and/or stripping ratio is deteriorating

Over 20% growth

~1.5 btpa (with China at about 1btpa). This is absolutely phenomenal considering how long it took the world to develop the market to its current level.

Of course, major mining companies have a strong incentive to grow to meet this demand. However, new mine development can be subject to delays and a lack of capital availability (generally a huge capex requirement) can prohibit others. As a result, few projects have come into production in the past decade. While the evolution of the market is relatively predictable because of the growth in China, the supply side is less certain, and continued shortages in the medium to long term appears likely.

The current record price level will hold for at least the next couple of years. Assuming the 50% increase of global production will gradually come into the market, price levels should come off the peak if there is no new demand – the question is when. However, the answer is not easy, as the world has not experienced a major economy like China industrializing within such a short time. It is easier to expect surprises than predict the future.

If we add India as a new demand source to the equation, there will be more surprises. India, with a population of 1.1 billion, close to the size of China, is also industrializing quickly. Its current steel capacity of about 50 mtpa, compared with about 600 mtpa of China's, is an up and coming force to be reckoned with. The explosive growth of steel demand that China is experiencing (Japan and Korea experienced the same on a much smaller scale), should give us some insight about India's impact on the future market. Furthermore, Russia and Brazil (the other BRIC countries) are becoming major world scale economies. All this adds to the long term sustainability of both volume and price point.

CANADA HAS A COMPETITIVE EDGE

Australia and Brazil, the iron ore elephant countries, have attracted substantial investment domestically and internationally, including from China, to develop their iron ore properties. Though these countries have shipping distances closer to China than Canada, Canada does have mammoth iron ore resources with existing infrastructure built to accomodate land and ocean shipment. The current approximate 35 mtpa production in Canada does not represent its real potential. Canada was one of the largest global iron ore suppliers after WWII.

Though exploration capital is available in Canada, production capital is harder to come by, hindering advanced developments and sometimes causing Canada more difficulties in participating in this iron ore bonanza. With Consolidated Thompson successfully attracting WISCO to Canada, its Bloom Lake Project in eastern Canada is on the map again with its iron ore asset pricing looking very attractive.

There is another significant Canadian competitive advantage worth mentioning. As the free digging of direct shipping ore (DSO) becomes less available and insufficient to meet the growing demand, iron concentrates are being explored and produced in even the DSO-rich countries such as Australia and Brazil. However, the iron ore concentration process requires a great deal of water and power, both of which Canada has abundantly and inexpensively, giving Canada a competitive edge. The US ~$30 per tonne FOB cost from recent near production projects in Canada is a testimony to its low cost concentrates and the viability of Canadian iron ore assets. ■

Sandy Chim, CA, is Chairman of Century Iron Ore Group, and Chairman of Augyva Mining Resources Inc., a company listed on the TSX Venture Exchange, and non-executive director of Prosperity Minerals Holdings Limited, an iron ore trading company listed on AIM, London.