Chinese Statistics on Strategic Metals: Garbage In, Garbage Out

For decades, or more properly said, centuries China was a land of opacity. Information that came out was often half-true or heavily embroidered. Foreign visitors reported only what they were allowed to see while the apparatchiks of the Imperial (and then Communist) bureaucracy were masters of obfuscation and misinformation.

While China has been viewed as much more open in recent years, the cases involving Rio Tinto and Glaxo SmithKline would suggest it is still dangerous to know too much about certain industries or to seek to know more.

Rare Earths

The one certainty is that China is the largest player by far in Rare Earths with total domination of the space with over 90% market share, however that is where the certainties end. One would naturally think that a market where one country makes up almost the totality or production would be rather easy to read, but instead REEs are one of the most opaque trading spaces on the planets. Price, volume and vendor discovery are akin to searching for a needle in a haystack.

In early 2013, in a piece on the Rare Earth statistic conundrum, Gareth Hatch commented ".. it has been widely reported that the total quantity of rare earths exported from China in 2012 was 16,265 t, per statistics from "Hong Kong-based China Customs Statistics Information Service Center", with this figure representing "a drop of 3.5% compared to the year before", i.e. 2011.

This would mean that the 2011 figure for total rare-earth exports from China was 16,855 t. The problem with that is that

last year, the vice-director of the Chinese Ministry of Industry and Information Technology indicated that the figure for 2011 was 18,600 t, and this figure was also widely used and reported by other sources throughout 2012 – even as recently as last month, in the same article that I criticized recently for getting the smuggling numbers wrong.

So, which is it? 16,855 t or 18,600 t? If it is the latter, then the actual drop from 2011 to 2012, assuming that the figure of 16,265 t is accurate ……, (the drop) is closer to 12.6%, not 3.5%, as the newer value being implied for 2011 would suggest".

The problem here is a combination of factors. Firstly there are the ubiquitous export quotas, then export (and import) duties and finally a desire by the Chinese to control information on the marketplace with muddying of the waters being the rule rather than the exception. There may in fact also be other reasons behind the wave of misinformation in the space. As Gareth mentioned lot of smuggling of Rare Earths has gone on and apparently still goes on. As most of the clandestine mines (particularly those exploiting Ionic Adsorption clays in the south of the country) were shut down three or four years ago (at least so we were all told) then the smuggled material must NOT be coming from backyard operators but instead from the very largest players. Strangely enough these are the anointed "National Champions" for REEs and in some cases have the government as a key shareholder or a symbiotic relationship with the halls of power. So the rising tide of clandestine REEs out of China (much of its exiting through Vietnam) would appear to have quasi-official blessing.

Some stray REEs falling off the back of a truck would not matter too much but in a highly strategic and frankly, highly controversial commodity such as Rare Earths, this issue takes on new significance. We cannot help wondering whether, despite the fanfare, that some degree of tolerance for exploiting the

clay deposits may have resurged as they are the best and easiest source of supply of the Heavy Rare Earths within China.

Antimony
China has dominated the antimony space longer than any other metal, in fact since the late 1800s. However from a position maybe 10 years ago of controlling over 85% of mining and end-product (largely Antimony Trioxide), it now maybe controls 65% of the mining and still more than 85% of the end-product. This gap has been closed by China becoming the largest importer of concentrates, particularly from Burma/Myanmar.

However, it also imports most of the artisanal mining output of Laos, Honduras and Bolivia. By its very nature this trade is murky and at best quasi-legal.

Several months ago I attended the Second World Antimony Forum in Madrid, where I made a presentation. It was here that the chatter about Myanmar's key role in maintaining Chinese control was loudest. This was a true revelation as Burmese production doesn't figure in global production statistics and doesn't merit attention in the USGS survey of where the global reserves.

In 2011 Myanmar, former Burma, exported around 14,000 tpa of antimony concentrate with unknown content of Sb (most of it to China). No-one really knows for sure as most of it is smuggled by the rebel tribes in the north of Burma that mine it and then send it into China for processing. Therefore it is "conflict" Antimony.. concentrate for weapons.
The pundits with a good calculator take the difference between what China supposedly mines, what it officially imports and then what it supposedly exports and the difference is mainly the widely differing X factor of Burma.

The 14,000 tpa number can be roughly inferred from official Chinese imports as can be derived from trade data. China

imported around 6,300 tonnes directly from Myanmar and around 8,000 tonnes from Thailand. However Chinese imports from Thailand are also from Myanmar as can be derived from trade data of Thailand. There are no official export statistics for Myanmar nor is there any information on who is mining such amounts. It is said that it is from artisanal mining, though experts doubt this claim. It takes probably more effort to dig into trade data in order to reveal material streams than industry players have the will to do, particularly when one wrong piece of data can make all calculations erroneous. In the years subsequent to 2011 it is felt that imports from Myanmar increased steadily, so the role of the country as a Chinese source is now even bigger.

More on this rubbery state of things can be found in this fascinating report (in German) from the German government's equivalent of the USGS:

http://www.deutsche-rohstoffagentur.de/DE/Gemeinsames/Produkte/Downloads/DERA_Rohstoffinformationen/rohstoffinformationen-18.pdf?__blob=publicationFile&v=2

A Side Note on the USGS

In the absence of reliable figures from China, quite a lot of dependence falls upon USGS numbers. However, the numbers of the USGS regarding global reserves are to be taken with a grain of salt. Their numbers in Antimony reserves for Russia and Bolivia, for example, have remained the same since 1986. USGS reporting of Chinese reserves of Sb, given as 950,000 tonnes, were last stated by the Chinese as such in 2005. Since then they have dropped to currently 558,000 tonnes (National Bureau of Statistics China, 2013). Therefore dependence upon USGS numbers may be deluding Western observers as to the true situation of China (and others).

Lie, Damn Lies and Statistics

It is no wonder that there is so much faulty algebra when it comes to fathoming Chinese metals exports because China is a

big clandestine exporter of the end-products In Rare Earths and Antimony Trioxide. This theory is explained by Vietnam's hefty exports when the country has scarcely any production! The rationale behind this furtive movement is to avoid the Chinese export tax on these metals. In theory China is not fulfilling its export quotas and yet several countries in Europe are reporting imports from China that are greater than the whole quota.

The lesson from all this is that the waters are muddy indeed. And in our perception this helps the Chinese. If one thing is clear it is that everyone else is but a small asteroid circling the Chinese sun in the Rare Earth/Antimony (and Tungsten) solar systems. Eschew the gravitational pull and one floats off into outer space. Well, at least that is the way things work at the moment.

The big thing the Chinese should fear is the creation of a "parallel universe" of miners and roaster/smelter operators outside China that divert product direct to Western consumers without the product ever entering the swirling mass of the Chinese "system".

Conclusion

The use of the word "maybe" when conjecturing China's position in various metals is a must as no-one really knows, including the Chinese, how much they control of some of the metals that they have long had a stranglehold on.

However, the "leakages" on China's borders in strategic metals is a murky and fluctuating world. With recent tensions with Vietnam we may wonder how much longer that country can be the channel of choice for illegal metals traffic if the problems continue. Then with Burma/Myanmar the challenges are twofold. A good case could be made that Antimony sourced from that country is "conflict" metal and thus controversial. While the focus on "conflict metals" has been almost exclusively in Africa there is no reason for this conversation to be expanded

to South East Asia. Even more problematical though is the gradual normalization of administration in Burma. Peace breaking out is bad news for those Chinese processors sourcing from rebel tribes in Myanmar.

Misinformation can sometimes turn around (like wartime counter-intelligence) to bite the party that “started” the bad data in the first place. As the Chinese play more in the global sandbox the biggest danger they face is starting to believe, and make business decisions based upon, their own misinformation.