

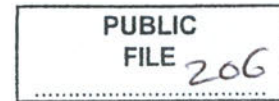
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16 November 2012



PUBLIC FILE

**Re: Investigations ITR 190a and 190b: Zinc coated (galvanised) steel and aluminium zinc coated steel exported from China, Korea and Taiwan.**

Please find attached a submission from Peter Drysdale, Luke Hurst and Ryan Manuel for the abovementioned investigations.

This submission establishes that:

- The Chinese steel industry, by all standard measures, is less concentrated and more competitive than most other major steel markets.
- That Chinese steel domestic and export product prices appear to behave in a pro-competitive way.
- That there is no evidence of unusual divergence between China's steel export prices and those of other competitors in recent years. Rather, steel prices have been generally subject to downward pressure in all markets because of weak demand in relation to capacity.
- It would be difficult to infer that there has been 'dumping' of product into the Australian market from China on the basis of this evidence during under review.

## CONTEXT

Understanding the capacity of the Chinese or other national steel industries to price discriminate in foreign markets in a predatory fashion (or to ‘dump’ product into foreign markets) requires an understanding of industry and corporate organisation in each national market. It is sometimes argued that there is insufficient information about the behaviour of state-owned or private corporations in China to be able to assess this matter.

This submission demonstrates that in fact there is more information about corporate organisation and structure in China relevant to making such assessments than sometimes suggested. It establishes that:

1. The Chinese steel industry, by all standard measures, is less concentrated and more competitive than most other major steel markets.
2. That Chinese steel domestic and export product prices appear to behave in a pro-competitive way.
3. That there is no evidence of unusual divergence between China’s steel export prices and those of other competitors in recent years. Rather, steel prices have been generally subject to downward pressure in all markets because of weak demand in relation to capacity.
4. It would be difficult to infer that there has been ‘dumping’ of product into the Australian market from China on the basis of this evidence during under review.

## CHINA’S STEEL INDUSTRY CONCENTRATION

It is estimated that China has around 650 steel mills in total (Uren 2012). Table 1 shows that the Chinese steel market has 61 major producers – the top 5 producers account for only 34.9 per cent of total Chinese steel production (see Table 2 for data on China’s top 10 steel producers). Although the industry might appear to be highly concentrated, in fact China’s steel industry is much less concentrated than any other major national steel industry.

*TABLE 1: Concentration ratio of major steel producing countries, 2011*

Country of origin/main domicile	Herfindahl–Hirschman Index (HHI)	Major producers* share of global output (%)	No. of major producers
China	0.031 (Low)	47.0	61
Japan	0.28(High)	7.3	6
South Korea	0.51 (Very high)	4.7	3
USA	0.30 (High)	4.3	5

\* ‘Major producers’ are those listed in the top 129 producers globally in the Metal Bulletin’s *Top steelmakers 2012 edition*.

SOURCES: Metal Bulletin (2011), authors’ calculations.

To illustrate the industry concentration of China’s steel industry the Herfindahl–Hirschman Index (HHI) is used. The HHI is a commonly used measure in competition investigations by Australia and US government departments and is calculated by adding the sum of the squares of the market share of each rival firm in the relevant market, thereby giving greater weight to the market shares of the larger firms. The index can range from 1 (when a market is fully concentrated) to 0 (when it is fully

dispersed) – values above 0.25 are generally regarded as indicating significant market concentration.

*TABLE 2: China's top 10 domestic steel producers, 2011*

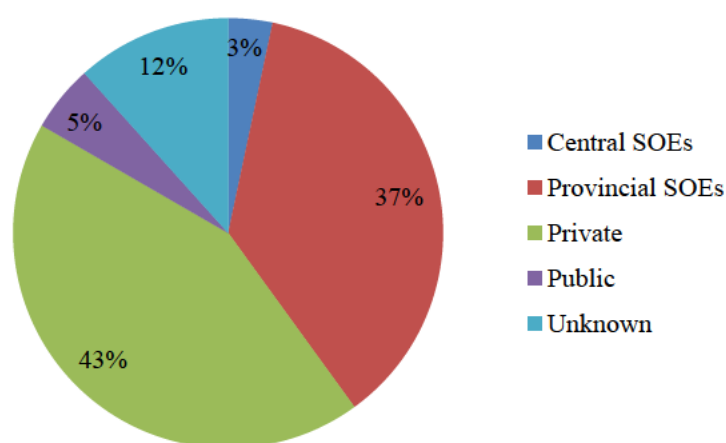
<b>Global Rank</b>	<b>Company</b>	<b>Ownership/ Administration</b>	<b>Headquarters</b>	<b>Output (mt)</b>	<b>% of domestic production</b>
2	Hebei Iron & Steel Group Co Ltd	Provincial SOE	Hebei	59.19	10.2
3	Baosteel Group Corp	Central SOE	Shanghai	43.34	7.5
4	WISCO - Wuhan Iron & Steel (Group) Corp	Central SOE	Hubei	37.68	6.5
7	Jiangsu Shagang Group Co Ltd	Private	Jiangsu	31.92	5.5
8	Shougang Group	Provincial SOE	Beijing	30.04	5.2
11	Shandong Iron & Steel Group	Provincial SOE	Jinan	24.02	4.1
13	Anshan Iron & Steel (Group) Corp	Provincial SOE	Liaoning	21.37	3.7
15	Bohai Iron & Steel Group	Private	Tianjin	19.19	3.3
20	Maanshan Iron & Steel Co Ltd	Provincial SOE	Anhui	16.68	2.9
21	Benxi Iron & Steel (Group) Special Steel Co Ltd	Provincial SOE	Liaoning	16.49	2.8

SOURCES: Metal Bulletin (2011), authors' calculations.

## COMPETITION IN THE CHINESE STEEL INDUSTRY

The ownership structures of China's steel producers are diverse. Of the top 61 Chinese steel producers in 2011, two were centrally administered SOEs (accounting for 14 per cent of production); 22 were provincially administered SOEs (accounting for 45 per cent of production); and 3 were privately owned (accounting for 30 per cent of production) (see Figures 1).

*FIGURE 1: Number of Chinese steel producers by ownership, 2011*

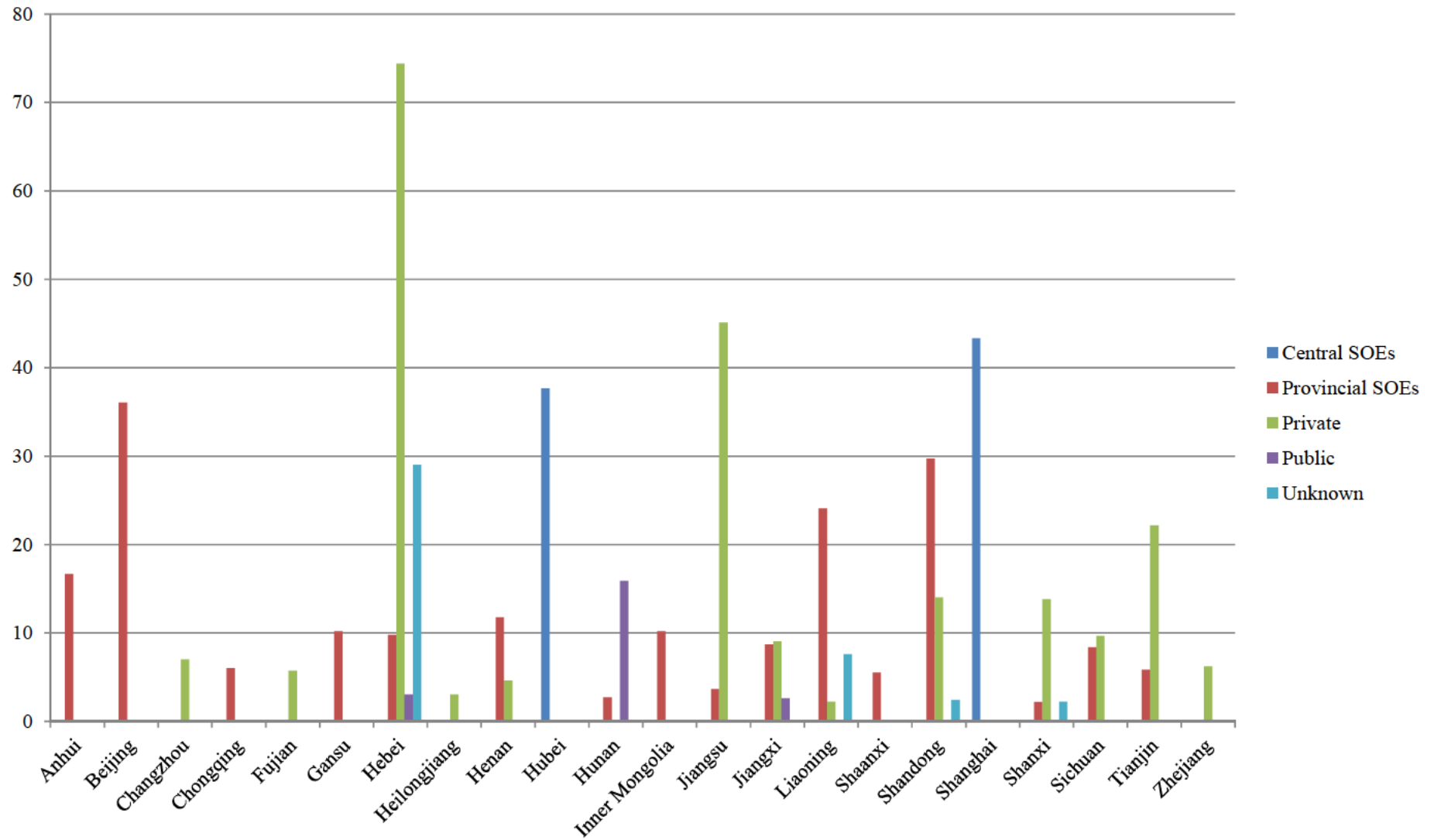


SOURCES: Metal Bulletin (2011), authors' calculations.

Because SOEs face strong incentives to make a profit (see below), there is significant competition among individual SOEs, as well as between them and the private sector. Of the 22 regions with a large steel producer, 12 have more than one – Hebei province has highest level of production with 13 major producers (see Figures 2 & 3 below).

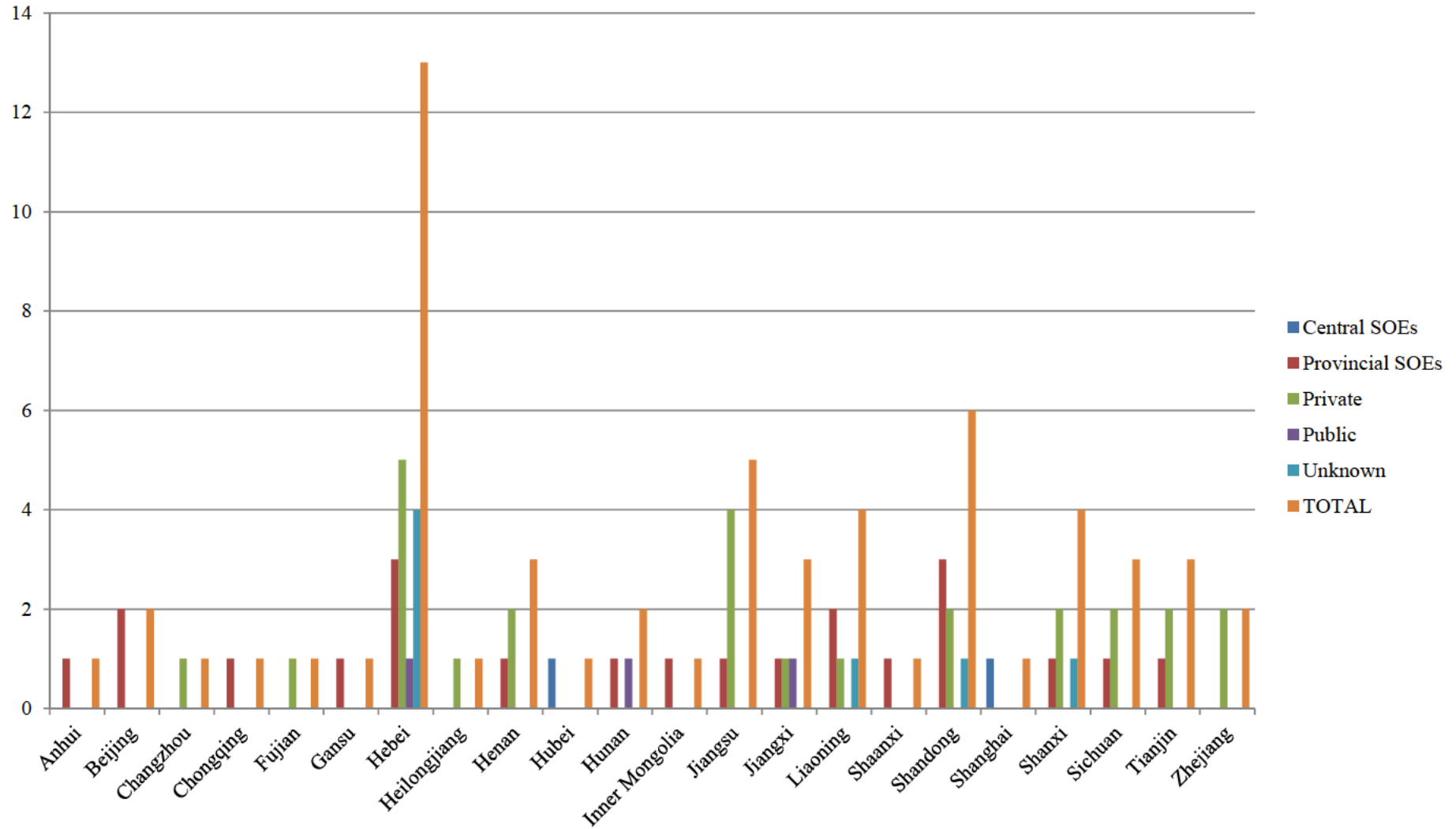
Each of these regions is essentially competing with the other regions, and this gives each of these SOEs a strong profit motive. The profit motive means that it is not in the interests of SOEs to price below cost. Competition from a range of other suppliers means that it is in their interests to keep costs as low as possible.

FIGURE 2: Chinese steel production by province and ownership, 2011(mt)



SOURCES: Metal Bulletin (2011), authors' calculations.

FIGURE 3: Number of Chinese steel producers by province and ownership, 2011



SOURCES: Metal Bulletin (2011), authors' calculations.

## STATE INTERVENTION IN CHINA'S STEEL INDUSTRY

China's State-owned Asset Supervision and Administration Commission (SASAC) supervises enterprises that are wholly owned by the state. At the central level they control just 123 SOEs. These SOEs are designated as 'national champions', and receive tax advantages and preferred access to credit from State Owned Banks (including 'policy' banks). In terms of sector, SOEs controlled by SASAC are usually concentrated in so-called pillar industries (equipment manufacturing, auto, information technology, construction, iron and steel, non-ferrous metals, chemicals, and surveying and design).

SASAC is at the same level in the bureaucracy as the SOEs themselves, and it is subordinate to the NDRC, the State Council and the Economics and Finance Leading Small Group (see Figure 4). In general, it is more in the interests of these higher-level actors to have SOEs turn a profit rather having them tightly controlled by state decree.

SASAC takes a supervisory and guidance role. Its main role is to try and ensure that fully owned central SOEs follow state and Party decrees while still turning a profit. SASAC contains 14 bureaux performing state functions and 7 bureaux performing Party functions.

SOE senior management must report to SASAC regularly. The frequency and type of report for the steel industry is currently unknown. SASAC has some influence over SOE budgets, and can investigate SOEs at the behest of the State Council. But the day-to-day running of the company is usually handled by the SOE itself.

SASAC currently controls two steel producers at the central level: Baosteel and WISCO (Wuhan Iron and Steel Corporation). It also controls SinoSteel, which is China's largest iron ore importer.

### *Importance of regional competition*

While SASAC is controlled at the central level by the central government through the State Council, at the provincial and prefectural level its focus is more on the interests of the provincial and prefectural level government rather than the priorities of the central government or the central SASAC office. These lower levels of government are more interested in competing with each other, particularly through having successful local SOEs, or strong economic growth.

This competition means that local governments generally ignore central decrees should they interfere with their own interests. So while the two steelmakers centrally controlled by SASAC (see above) have regularly tried to force provincial-level steelmakers into mergers, they have been unsuccessful (Baosteel's attempts at mergers in Henan are the most obvious example). Local officials approve the majority of investments, and local SASAC offices follow the mandates of local officials rather than directions from the central SASAC offices.

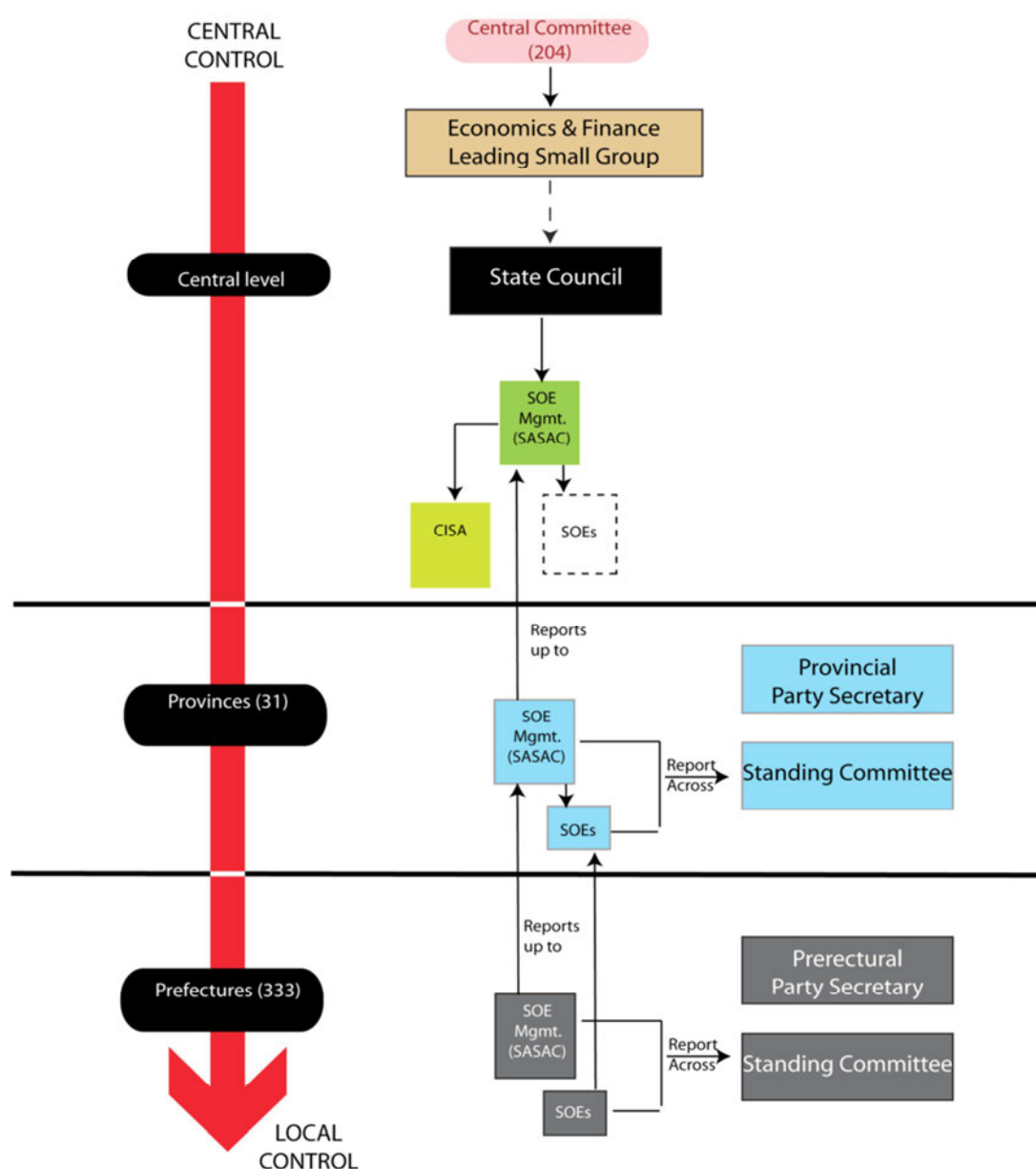
This pattern continues throughout all the levels of Chinese government below the central level. This means that there is considerable competition between Chinese SOEs, including SOEs at different levels of government, and this competition is a more powerful driver of behaviour than any governmental edict. The heads of provinces, prefectures, or counties need successful SOEs to demonstrate success and achieve advancement, and they have a greater say in the activities of local SASACs than central SASAC offices.

### SASAC's influence on the steel industry

SASAC influences the steel market firstly through control of the China Iron and Steel Association (CISA), which from 2009 has undertaken all price negotiations with foreign raw material suppliers. The day-to-day workings of CISA and its negotiating strategies and relationships with individual SOEs are not able to be dealt with here. However, CISA has no power to influence the price of the raw materials. The raw materials purchased by CISA are usually bought on the international spot market at market price.

SASAC is also a player in the market through its varying levels of control over fully state-owned steel SOEs at central, provincial and prefectural level. SASAC has exerted influence in the form of forcing steel-making SOEs to negotiate through the group body (CISA) rather than individually. But this influence is only direct at the central level – as noted above, it is not easy for SASAC to compel coordination and compliance at the local level. An example is the wish for larger steelmakers to merge with provincial level makers but without success.

FIGURE 4: Lines of authority in the steel industry



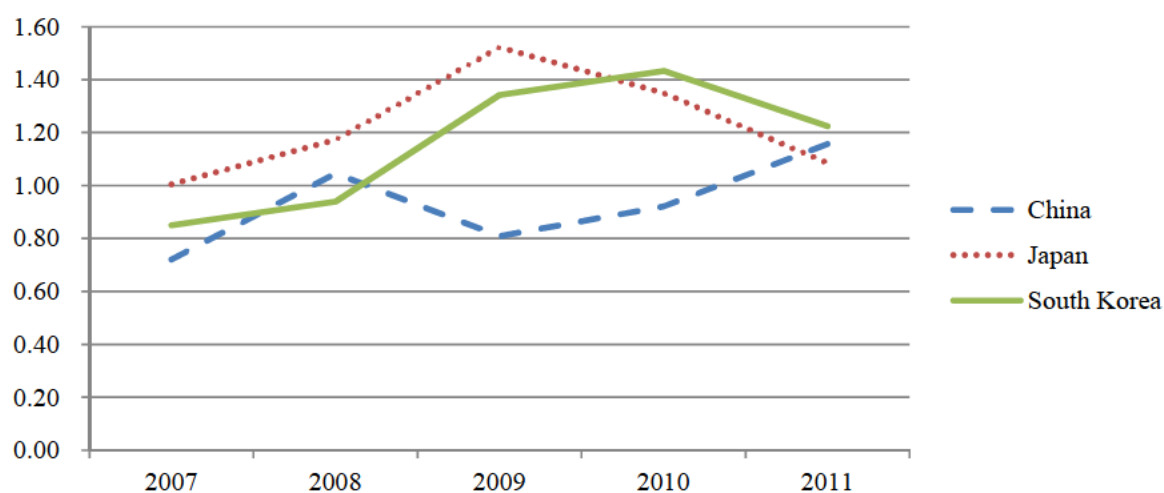


## PRICE BEHAVIOUR

The average Australian import prices for *flat rolled iron or non-alloy steel, <600mm, coated with zinc* and *flat rolled iron or non-alloy steel, >600mm, coated with aluminium* are given for the period 2007 to 2011 in Figures 5 and 6 below.

These data do not support the view that the Chinese steel exporters are pricing below that of global competitors. Chinese prices of *flat rolled iron or non-alloy steel <600mm, coated with zinc* have risen relative to similar product from Japan and Korea over the same period (see Figure 5).

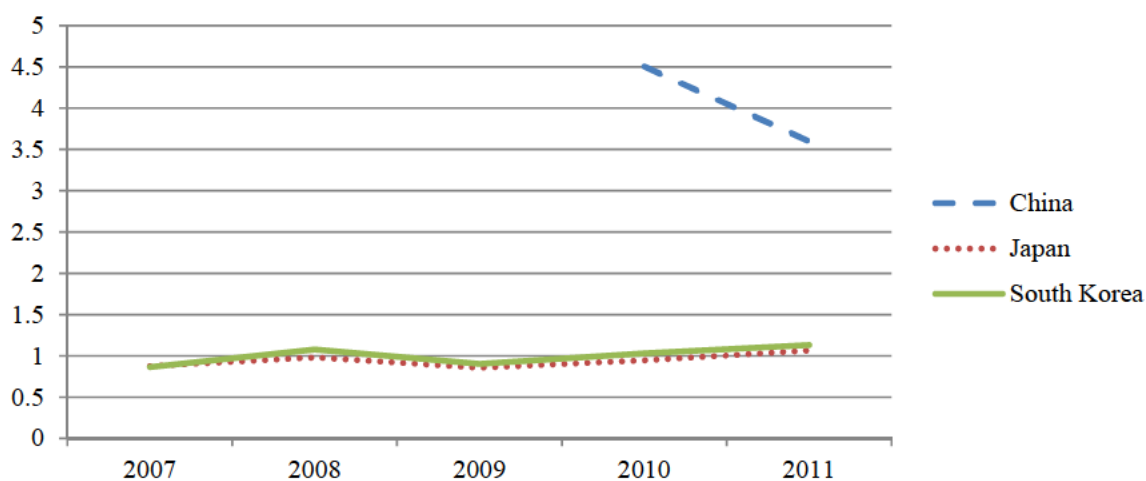
FIGURE 5: *Flat rolled iron or non-alloy steel, <600mm, coated with zinc average import prices to Australia, 2007-2011 (\$US/kg)*



SOURCE: UN comtrade database.

The average unit value of *flat rolled iron or non-alloy steel, >600mm, coated with aluminium* from China to Australia have fallen from approximately US\$4.50 to US\$3.50 per kilogram and remains approximately two times higher than the unit value of imports of similar product from Japan or Korea (see Figure 6).

FIGURE 6: *Flat rolled iron or non-alloy steel, >600mm, coated with aluminium average import prices to Australia, 2007-2011 (\$US/kg)*



SOURCE: UN comtrade database.

### Raw materials

The majority of China’s steel making production uses blast furnace technology, which require iron ore and coking coal as the major inputs – as opposed to electric arc furnaces, which require scrap steel. The markets for coking coal and iron ore have recently moved towards international spot pricing mechanisms and are not susceptible to manipulation by Chinese, or any other, buyers.

Therefore are no cost advantages that can be achieved by manipulation of raw materials prices except through decreased transport costs which occur through geographic proximity to major iron ore and coal exporters.

### Labour

Though labour costs account for a much smaller share of steelmaking costs than raw materials, the price of labour varies much more by country than prices for iron ore, coal and other raw material inputs such as scrap.

In 2008, although they have been rising rapidly over the past half-decade, China’s wages in smelting and pressing of ferrous metals were still only US\$5518.43 per year (see Table 3) (Banister & Cook 2011).

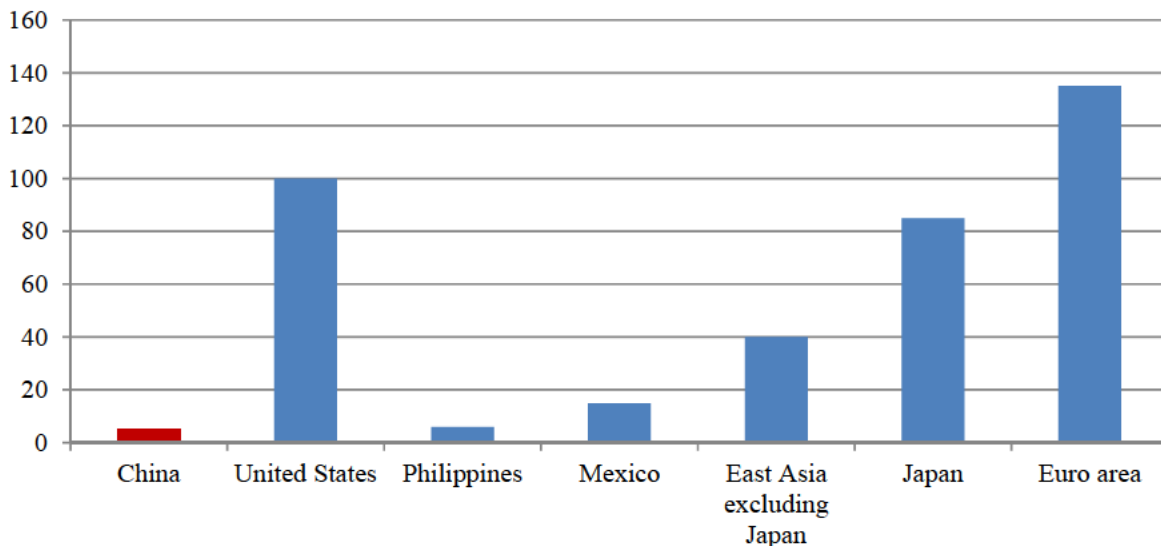
TABLE 3: Earnings in smelting and pressing of ferrous metals in China, 2002-08 (US\$)

2002	2003	2004	2005	2006	2007	2008
2405.691	2878.924	3372.641	3845.713	4320.866	4926.93	5518.43

SOURCE: Banister & Cook (2011).

In comparison to other countries, China’s index of hourly wages in the manufacturing sector in 2008 is low (see Figure 7). The differences are likely to be robust, despite difficulties of data comparability.

FIGURE 7: Index of hourly compensation costs in manufacturing, 2008 (Index, US = 100)



NOTE: These data are not exactly comparable and comparisons can be made only with caution.

SOURCE: Banister & Cook (2011).

Based on these observations, Chinese steel products do have some cost advantages but several other factors such as infrastructure and geographic proximity may offset these.

## **CONCLUSION**

The analysis of the Chinese steel industry establishes that:

1. The Chinese steel industry, by all standard measures, is less concentrated and more competitive than most other major steel markets.
2. Chinese steel domestic and export product prices behave in a normal pro-competitive way.
3. There is no evidence of unusual divergence between the national and export prices of steel products in recent years; rather steel prices have been generally subject to downward pressure in all markets because of weak demand in relation to capacity.
4. It would be very difficult to infer that there has been ‘dumping’ of product into the Australian market from China on the basis of this evidence during.

## **REFERENCES**

Banister J & Cook G 2011, ‘China’s employment and compensation costs in manufacturing through 2008’, *Monthly Labor Review*, March, pp. 39-52.

Uren, D 2012, *The kingdom and the quarry*, Collingwood, Black Inc.