1 Executive Summary

Based on a comprehensive analysis of the working mechanisms of the Chinese steel industry, this study shows that the Chinese steel industry is still firmly embedded in a powerful state-business cartel. China's steel enterprises are not operating in a competition based domestic market environment, but rather uphold very close relations to government agencies on local, provincial as well as central levels. As a result all major developments regarding overall industry organization, concentration levels, regional cluster development, inward FDI policies etc. as well as individual firm strategies regarding product developments, import/export activities, outward bound FDI initiatives etc. are co-determined and directed by government organizations.

The government's claim to guide and even direct the developments of the Chinese steel industry is clearly stated in the "Eleventh Five Year Program for Economic and Social Development" and especially the "Iron and Steel Industry Development Policy" which constitutes the centerpiece of all steel related policy initiatives by China's government authorities. This latter document provides a comprehensive and detailed catalogue outlining the central government's development goals for the nation's iron and steel industry. In addition, it describes which instruments the Chinese government intends to employ in order to push the steel industry and individual enterprises in the intended direction. Furthermore, it contains precise rules determining numerous sanctions to be imposed on companies violating government policies, thereby contradicting the notion of a non-binding character of policy initiatives directed towards the steel industry.

As the dominating structural element of the state-business nexus in Chinese steel industry a multi-layered system of alliances can be identified. At the national (central government) level, the Chinese steel industry is being directed and more or less micro-managed by a politico-business cartel we are calling the 'China Steel Inc.'. The 'China Steel

Inc.' is made up by the National Development and Reform Commission (NDRC), the China Iron and Steel Association (CISA), the State-owned Asset Supervision and Administration Commission of the State Council (SASAC) as well as the top management of China's leading steel enterprises. In addition, and often in defiance of the 'China Steel Inc.', local governments and smaller steel enterprises form their own local alliances designed to promote local steel enterprises and provide them with protection and shelter in the face of adverse (central) policies. These cartel-like alliances on the central as well as local levels result in a situation where 'market failures' are reinforced by 'policy failures'. 'Market failures' are understood to arise in so far as market mechanisms are not allowed to perform their regulatory function. 'Policy failures' come into existence because the juxtaposition of the various politico-business alliances results in a rather paradoxical state of over-regulation and excessive political interference on the corporate level while at the same time an overarching regulatory framework is lacking on the macro-level.

This 'market failure' cum 'policy failures' results – *inter alia* – in irrational capacity expansion and the creation of massive overcapacities estimated to amount to more than 100 million tons/year covering all product ranges. (Estimation based on supply-demand structures existing before the sub-prime crisis led the global economy into recession. Since then the mismatch between installed capacity and demand has further expanded.)

The relationship between state and business in China's steel industry goes beyond joint planning, protection and decision making processes, but involves substantial monetary and non-monetary support and protection by government agencies as well. A broad array of mechanisms by which governments support 'their' steel enterprises can be identified, including grants, various kinds of 'in-kind' as well as fiscal subsidies, capital market interventions, preferential tax arrangements, subsidized loan facilities, access to systematically under-priced inputs, non-execution of internationally accepted minimum standards of labor protection and environmental sustainability, etc.

Data available for China's *listed* steel corporations alone documents discretionary tax breaks valued at 7.607 billion Yuan RMB (plus substantially reduced corporate income tax rates), governmental subsidies amounting to 2.151 billion Yuan RMB, as well as preferential lending facilities worth 753 million Yuan RMB for the period 2002 to 1.Q. 2008.

As listed steel corporations are commanding a share of no more than about 40% China's total crude steel respectively steel products output, very substantial *additional* tax breaks, subsidies, preferential lending facilities are assumed to have been made available to China's non-listed steel enterprises.

Against the background of these findings we come to the conclusion that the Chinese iron and steel industry is not governed by market principles. Instead a complex array of arms-length state-business interactions is determining industry developments and 'market' outcomes. Government organizations are intervening directly and indirectly in industry development as well as the micro-management of individual steel enterprises. As such the cost structures and sales prices of China's steel enterprises do not reflect real market constellations and scarcities. In general it can be stated that China's steel enterprises are operating at artificially depressed cost levels.

It is against these findings that the emergence of Chinese steel enterprises as major exporters on the global steel markets must be evaluated. In the run of a few years only, China has transformed itself from a net importing country to the – by far – largest steel exporter in the world. In 2007, the country already commanded a share of 20.7 percent of global steel exports. Chinese steel exports to Europe have increased at an even greater speed than China's total steel exports. The Chinese share of total EU steel imports has quickly risen to reach almost 20 percent in 2007. A substantial share of these has been in the area of higher value added products. European imports from China in this category, which among other items include metallic coated sheets and cold rolled stainless sheets, have increased more than eight-fold between 2005 and 2007.

This expansion of Chinese export activities is not based on a 'natural' competitive advantage of China in the production of steel. On the contrary our analysis shows that Chinese steel exports to Europe actually incur higher costs than those that arise to European producers supplying the local markets. Given only minor cost differences in ex-works production costs, the cost/price competitiveness of Chinese exporters on the European markets hinges on international shipping costs. Adding these to the equation, Chinese steel mills end up with a clear cost disadvantage when trying to sell their products on the European markets.

The Chinese government, however, is promoting export activities by domestic steel producers on a highly selective basis, targeting high valueadded, technology intensive products as the vanguard of China's steel exports. Specific measures include first of all an intricate set of cascading value added tax (VAT) rebates and export taxes that provides for a discretionary steering of export activities. These VAT export rebates may be coupled with income tax reductions, preferential export credits and guarantee schemes provided by the China Export Import Bank (China Eximbank) and other state-owned financial institutions.

The emergence of Chinese steel enterprises as major exporters on the global, and particularly the European steel markets must therefore be understood as being the result of intra-firm cross-subsidization practices as well as serious policy induced distortions in the 'market' process in China. By distorting the cost/price competitiveness of Chinese steel enterprises vis-à-vis foreign enterprises, and rendering Chinese players stronger than they actually are, Chinese government organizations are interfering in the global market system, impeding its allocative and welfare enhancing function.

In this study, the term "China Steel Inc." is only used in the way outlined above. No reference whatsoever is intended to China Steel Co., one of the world's leading steelmakers, based in Kaohsiung, Chinese Taipei.