THE CHINA SYNDROME:
HOW SUBSIDIES AND GOVERNMENT INTERVENTION CREATED THE WORLD’S LARGEST STEEL INDUSTRY

Prepared for:

The American Iron & Steel Institute
The Steel Manufacturers Association
The Specialty Steel Industry of North America
The Committee on Pipe and Tube Imports

Embargoed: No release of this report in print, broadcast or online prior to
11:00 am EDT Thursday July 13, 2006
# TABLE OF CONTENTS

<table>
<thead>
<tr>
<th>Section</th>
<th>Page</th>
</tr>
</thead>
<tbody>
<tr>
<td>EXECUTIVE SUMMARY</td>
<td>iii</td>
</tr>
<tr>
<td>INTRODUCTION</td>
<td>1</td>
</tr>
<tr>
<td>Subsidies and the Chinese Steel Industry</td>
<td>1</td>
</tr>
<tr>
<td>Chinese Subsidies and the WTO</td>
<td>3</td>
</tr>
<tr>
<td>THE CHINESE STEEL INDUSTRY</td>
<td>5</td>
</tr>
<tr>
<td>The Government’s Creation of the Chinese Steel Industry</td>
<td>5</td>
</tr>
<tr>
<td>The Structure of the Chinese Steel Industry</td>
<td>6</td>
</tr>
<tr>
<td>Fragmentation of the Chinese Steel Industry</td>
<td>7</td>
</tr>
<tr>
<td>Government Ownership</td>
<td>10</td>
</tr>
<tr>
<td>Future Expansion</td>
<td>11</td>
</tr>
<tr>
<td>Government Management of the Steel Industry</td>
<td>13</td>
</tr>
<tr>
<td>China’s Steel Policy</td>
<td>13</td>
</tr>
<tr>
<td>The Five-Year Plans</td>
<td>14</td>
</tr>
<tr>
<td>List of Encouraged Industries</td>
<td>15</td>
</tr>
<tr>
<td>Foreign Investment Catalogue</td>
<td>15</td>
</tr>
<tr>
<td>DIRECT GOVERNMENT SUBSIDIES TO THE STEEL INDUSTRY</td>
<td>17</td>
</tr>
<tr>
<td>Government Grants to the Steel Industry</td>
<td>19</td>
</tr>
<tr>
<td>Cash Grants</td>
<td>19</td>
</tr>
<tr>
<td>Energy and Raw Material Grants</td>
<td>20</td>
</tr>
<tr>
<td>Land Grants</td>
<td>21</td>
</tr>
<tr>
<td>Transfers of Ownership</td>
<td>22</td>
</tr>
<tr>
<td>Debt-to-Equity Swaps</td>
<td>22</td>
</tr>
<tr>
<td>Debt Forgiveness and Inaction Regarding Non-Performing Loans by State-Owned Banks</td>
<td>23</td>
</tr>
<tr>
<td>Preferential Loans and Directed Credit from State-Owned Banks</td>
<td>25</td>
</tr>
<tr>
<td>Tax Incentives Provided to the Steel Industry</td>
<td>30</td>
</tr>
<tr>
<td>China’s Tax Policies</td>
<td>30</td>
</tr>
<tr>
<td>Tax Incentives for Firms in Special Economic Areas</td>
<td>30</td>
</tr>
</tbody>
</table>
EXECUTIVE SUMMARY

China has the world’s largest steel industry. Indeed, in 2005, China made more steel than the next four largest producers combined. From 2000 to 2005, China’s steel production increased by over 170 percent, as the Chinese industry added capacity at a furious rate. Between 1998 and 2005, China’s steel exports more than quadrupled, as China established itself as one of the world’s leading exporters. This explosive growth in both production and exports would not have been possible without the support of the Chinese government.

The structure of the Chinese steel industry reflects the Chinese government’s ongoing role. The Chinese steel industry continues to be primarily state-owned. The Chinese government intervenes directly and extensively in the steel industry, and retains a high degree of decision-making authority over its development. China’s new Steel Policy specifically provides for continued direct subsidization of the steel industry in the form of tax refunds, discounted interest rates, and other preferential policies. The policy also provides various forms of indirect support, such as restrictions on foreign investment. The policy makes consolidation of the industry a priority, and in fact, there have been several well-publicized mergers of state-owned producers in the last year.

The ways in which the Chinese government provides direct and indirect benefits to the steel industry include:

Cash grants. China’s subsidies notification to the World Trade Organization indicates that it continues to provide cash grants to a number of enterprises. For example, the Chinese government provides steel producers with cash grants to defray costs for raw materials and energy.

Land grants. The Chinese government provides steel producers with land at a fraction of its market value.

Transfers of ownership interests on terms inconsistent with commercial considerations. Shares in state-owned steel producers have been transferred to other state-owned producers at prices well below their market value. This has enabled producers to acquire new facilities and expand production at a low or even no cost.
**Conversion of debt to equity in steel companies.** Chinese steel producers owe billions of dollars to state-owned banks and asset management companies. In many cases, the asset management companies and banks have converted non-performing loans into shares in steel producers in an effort to reduce the producers’ debt loads. Two of China’s largest steel producers, Shanghai Baosteel and Anben, benefited from this process.

**Debt forgiveness and inaction regarding non-performing loans.** State-owned banks and asset management companies have also simply forgiven billions of dollars in bad debts owed by Chinese steel producers. They have also declined to press for payment in cases where market-oriented lenders would have taken action to collect on loans.

**Preferential loans and directed credit.** The state-owned banks have loaned the Chinese steel industry billions of dollars at preferential interest rates at the behest of the Chinese government. These low-cost loans funded a substantial portion of the industry’s capacity expansion between 2000 and 2005.

**Tax incentives, including a variety of income tax exemptions and reductions.** These tax benefits are available to and used by a variety of steel producers, including those with foreign investment, those located in Special Economic Areas and specific regions, and firms that produce for export.

**Targeted infrastructure development.** The Chinese government has built industrial parks, technology parks, and similar areas which provide steel producers with access to sophisticated facilities at reduced costs. These developments also commonly provide their tenants with tax advantages.

**Manipulation of raw material prices.** The Chinese government has used export restrictions on coke and scrap to reduce the cost of these inputs for Chinese producers. The Chinese government also has attempted to use import license schemes and intervention in price negotiations to control prices for imported iron ore, although its most recent efforts were signally unsuccessful.

**Manipulation of the value of the Chinese RMB.** China has a longstanding policy of deliberately keeping the value of the RMB below its market value. This has the
effect of making exports of Chinese steel and products containing steel artificially cheap, while effectively imposing a tax on imports from the United States.

The Chinese government has implemented other measures that provide the industry with indirect support, such as import barriers and barriers to foreign investment. The latter, in particular, may have prevented the industry from undergoing the sort of consolidation and closure of facilities that foreign majority ownership might trigger. China also has failed to enforce its environmental and labor laws fully. Taken together, these policies provide the Chinese steel industry with yet another artificial advantage in international competition.
INTRODUCTION

Since 1990, the Chinese steel industry has expanded at a phenomenal rate to become the largest in the world. Over this period, China has gone from being a net importer of steel to a net exporter. This change would not have been possible without the conscious and persistent support of the Chinese government. This report describes and analyzes the various ways in which the Chinese government has supported the unprecedented expansion of the Chinese steel industry.

The explosive growth of the Chinese steel industry has enormous ramifications for the global economy. It affects the markets of steel producers in other countries directly, as well as the availability and prices of iron ore, coke and coal, shipping, and other inputs used by steelmakers and others. China’s increased steel supply also affects the competitive position in world markets of manufacturers using steel in China versus manufacturers in other countries. Finally, the growth of the Chinese steel industry has profound implications for the world’s environment.

Subsidies and the Chinese Steel Industry

The Chinese steel industry in its present form is the direct product of massive subsidies and other support provided by the Chinese government. The Chinese government intervenes directly and extensively in the steel industry, and retains a high degree of decision-making authority over its development. China’s new Steel Policy specifically provides for continued direct subsidization of the steel industry in the form of tax refunds, discounted interest rates, and other preferential policies. The policy also provides various forms of indirect support, such as restrictions on foreign investment. The

* The authors would like to thank Tom Danjczek, Mindy Fleishman, David Hartquist, Roger Schagrin, Terry Stewart, and all the others who provided invaluable advice, comments, and information for this paper.
Steel Policy, as discussed in detail below, is a clear and unassailable example of the Chinese government’s management of nearly every major aspect of China’s steel industry.

The Chinese government has implemented its policy of support for the steel industry by providing the industry with massive subsidies and other forms of assistance, including:

- Transfers of ownership interests on terms inconsistent with commercial considerations;
- Conversion of debt to equity in steel companies;
- Grants to pay for energy and raw materials;
- Debt forgiveness and inaction regarding non-performing loans;
- Tax incentives, including a variety of income tax exemptions and reductions for Foreign Invested Entities, firms in Special Economic Areas, and firms that produce for export;
- Targeted infrastructure development, including government subsidies to build and finance industrial parks;
- Control over raw material prices and exports, including import licensing schemes to control the price of iron ore and export restrictions on coke;
- Manipulation of the value of the Chinese RMB to make Chinese exports artificially cheap;
- Preferential loans and directed credit, including “policy loans” to favored state-owned enterprises on non-commercial terms;
- Import barriers, including high tariffs and other practices that discriminate against foreign equipment and technology; and
- Barriers to foreign investment.

The result of this pervasive Chinese government support has been the creation of the world’s largest steel industry in a form far different from what the market would
have created. These policies and actions by the Chinese government have distorted world trade severely and have imposed tremendous economic costs on other countries, especially the United States. While subsidization of the Chinese steel industry is far from the only cause of the huge trade deficit of the United States with China, it represents the type of behavior the Chinese government has engaged in with respect to dozens of other industries. This analysis describes how the Chinese government has made one favored industry artificially competitive in world markets while disadvantaging market-oriented producers around the globe, including those in the United States. The massive manipulation of markets by the Chinese government has substantially impaired the anticipated benefits of China’s WTO accession and has severely distorted global markets.

**Chinese Subsidies and the WTO**

Many of these forms of assistance – including export subsidies, domestic content subsidies, and selective preferential bank financing – appear to violate China’s WTO obligations under the Agreement on Subsidies and Countervailing Measures (“Subsidies Agreement”). Many of the subsidies also violate the commitments China made in its WTO accession agreement, wherein China committed to eliminating immediately all subsidies prohibited under Article 3 of the Subsidies Agreement – a commitment it has failed to honor.

China has also failed to comply with its obligation to provide detailed information about its subsidy programs to the WTO on an annual basis. In fact, until recently, China had failed to make any of its required subsidy notifications since becoming a member of the WTO, despite repeated requests by the United States and other WTO member countries that China do so.¹ According to the U.S.-China Economic and Security Review Commission, “this lack of transparency compounds the difficulties in addressing China’s complex and pervasive system of subsidies.”²

---

² Id. at 38-39.
In April 2006, China finally filed its first subsidies notification with the WTO, identifying more than 75 types of subsidies.\(^3\) The notification provided a great deal of detail regarding tax incentives provided by the Chinese government, and somewhat less detail regarding various types of grants. Somewhat surprisingly, the notification confirmed that China continues to provide a broad range of subsidies contingent on export performance, even though such subsidies are specifically prohibited by the WTO Subsidies Agreement.\(^4\)

The notification included no discussion whatsoever of major categories of subsidies provided by the Chinese government, including transfers of ownership on terms inconsistent with commercial considerations; conversion of bad debts owed to state-owned banks into equity in the borrowing enterprise; government direction of credit through the state-owned banks; so-called “policy loans” at preferential interest rates; and the forgiveness of debts by state-owned banks. Not surprisingly, the notification does not discuss manipulation of the value of the RMB or government control over raw materials.

Information regarding the various subsidies provided to the steel industry by the Chinese government is not readily available. This makes it difficult for the United States and other WTO members to confirm that China is complying with its WTO obligations. This paper catalogs the information currently available. Any truly thorough examination of the role of subsidies in the creation and expansion of the Chinese steel industry would depend upon the ability to obtain accurate information directly from the Chinese government – information the Chinese government has not made public.

---


\(^4\) See Annex 1A: *Multilateral Agreements and Goods of the General Agreement on Tariffs and Trade 1994*, art. 3.1 (“Agreement on Subsidies and Countervailing Measures”).
THE CHINESE STEEL INDUSTRY

A steel industry has existed in China since ancient times. The current Chinese steel industry, however, is very much a product of recent government decisions. The Chinese government continues to own the overwhelming majority of the steel industry, and to control it directly and indirectly through a number of methods.

The Government’s Creation of the Chinese Steel Industry

When the Chinese Communist Party came to power in 1949, the Chinese steel industry had been decimated by 15 years of war. Although China was an overwhelmingly rural and agrarian country, the new leadership, under Mao Zedong, gave priority to the establishment of the steel industry. The government funneled massive resources into the construction of new mills, consistent with the then-prevalent Stalinist model of development, with its emphasis on heavy industry. The apogee of this effort was reached in 1958 with the onset of the “Great Leap Forward,” when Chairman Mao proclaimed that China would double its steel production over the course of a single year. This led to the widespread establishment of small steel mills – the so-called “backyard blast furnaces” – in towns and villages throughout China. The project was of course an economic, technological, and environmental disaster.

China subsequently returned to a more traditional approach to developing its steel industry, as the state continued to pour billions of dollars worth of resources into new steel mills. As a result of this investment, China emerged by the late 20th century as a major steel producer. In 1990, the first year for which reliable international statistics are available, China was the world’s fourth largest producer. In that year, it produced 67.2 million metric tons of steel, compared to 88.6 million metric tons in the United States and 110.3 million metric tons in Japan.

The Chinese steel industry grew steadily throughout the 1990s, as the government continued to devote a disproportionate share of resources to it. Production skyrocketed between 2000 and 2005, as the Chinese government directed massive

---

amounts of capital into the steel industry. By 2005, China was by far the world’s largest steel producer, with production of 349.4 million metric tons and accounting for more than 30 percent of global steel production.\textsuperscript{6} The following chart shows the explosive growth in Chinese steel production between 1990 and 2005.\textsuperscript{7}

\begin{center}
\begin{figure}
\centering
\includegraphics[width=\textwidth]{chart1.png}
\caption{CHART 1 \newline CHINESE STEEL PRODUCTION, 1990 - 2005}
\end{figure}
\end{center}

Exports of Chinese steel have followed a similar trend. In 1998, China exported only 5.9 million tons of steel.\textsuperscript{8} By 2005, this amount had more than quadrupled, to 27 million tons.\textsuperscript{9}

The Structure of the Chinese Steel Industry

The Chinese steel industry is marked by two notable characteristics: the very large number of steelmaking enterprises and the degree of government ownership. As recently as 2000, there were 1,045 companies in China producing steel, of which only

\begin{itemize}
\item \textsuperscript{6} International Iron and Steel Institute, \textit{World Steel in Figures 2005} 3 (2006).
\item \textsuperscript{7} International Iron and Steel Institute, \url{http://www.worldsteel.org/?action=archivedsteellist2}.
\item \textsuperscript{8} International Iron and Steel Institute, \textit{Steel Statistical Yearbook 2005} 73 (2005).
\item \textsuperscript{9} International Steel Statistics Bureau, \textit{Steel Statistics in the News}, available at \url{http://www.issb.co.uk/}.
\end{itemize}
34 produced more than one million tons per year.\textsuperscript{10} More recent estimates indicate there are as many as 800 steel mills in China, but only 16 have the capacity to produce more than 5 million tons per year.\textsuperscript{11} There has been some consolidation in the industry, and the China Iron and Steel Association, the official trade association of the Chinese industry, states that it has over 50 “medium and large” members. Nonetheless, experts predict that, after consolidation, China will still have over 100 different significant steel producers.\textsuperscript{12}

\textit{Fragmentation of the Chinese Steel Industry}

The degree of fragmentation in the Chinese steel industry is apparent from the production quantities of the major Chinese producers. Although China has the world’s largest steel industry, in 2004 only one Chinese producer, Shanghai Baosteel, ranked among the world’s ten largest producers. Only two Chinese producers, Shanghai Baosteel and Anshan (now Anben), produced more than 10 million tons in that year, while eight reached that level in 2005. In 2005, 25 Chinese producers ranked in the top 80 in the world.\textsuperscript{13} Yet these producers accounted for less than 40 percent of total Chinese production. The following table shows the ten largest Chinese producers and their production in 2004 and 2005.\textsuperscript{14}

\begin{table}[h]
\centering
\begin{tabular}{|l|c|c|}
\hline
Producer & 2005 Production (Million MT) & 2004 Production (Million MT) \\
\hline
Shanghai Baosteel & 23.8 & 21.4 \\
Anben & 18.4 & 16.8 \\
Tangshan & 16.1 & 7.7 \\
\hline
\end{tabular}
\caption{Major Chinese Steel Producers}
\end{table}

\textsuperscript{10} Qingfeng Zhang, \textit{A Comparison of the United States and Chinese Steel Industries}, 3 Perspectives No. 6 (2002).


\textsuperscript{12} Id.


\textsuperscript{14} Id.; Steel Business Briefing, \textit{China’s Steel Industry} (2006).
The Chinese government has recognized the negative aspects of this fragmentation, and thus a central focus of the Steel Policy is consolidation. The move to consolidate has picked up speed with the recent mergers of Chinese steel companies, including: Wuhan and Liuzhou (numbers 18 and 52 in world production, respectively); Anshan and Benxi (19 and 37); and Tangshan and Xiangang (12 and 68). Wuhan also acquired Echeng Steel, as discussed below, at no cost, while Tangshan acquired Chenguang Steel as well.  

The Chinese steel industry is also fragmented geographically. While steel production is concentrated in the northeast, no province accounts for more than 18 percent of China’s annual production. Moreover, several provinces have annual production of less than 5 million metric tons per year. The following table shows annual production of finished steel in China, by province, in 2005.

<table>
<thead>
<tr>
<th>Province</th>
<th>Production 1 ( mil. mt)</th>
<th>Production 2 (mil. mt)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Wuhan</td>
<td>12.0</td>
<td>9.3</td>
</tr>
<tr>
<td>Jiangsu Shagang</td>
<td>10.5</td>
<td>7.6</td>
</tr>
<tr>
<td>Shougang</td>
<td>10.4</td>
<td>8.5</td>
</tr>
<tr>
<td>Jinan</td>
<td>10.4</td>
<td>6.9</td>
</tr>
<tr>
<td>Laiwu</td>
<td>10.3</td>
<td>6.6</td>
</tr>
<tr>
<td>Maanshan</td>
<td>9.6</td>
<td>8.0</td>
</tr>
<tr>
<td>Panzhihua</td>
<td>6.2</td>
<td>6.0</td>
</tr>
</tbody>
</table>

The China Syndrome: How Subsidies and Government Intervention Created the World’s Largest Steel Industry

16  Steel Business Briefing, China’s Steel Industry (2006).
17  Id.

The China Syndrome: How Subsidies and Government Intervention Created the World’s Largest Steel Industry
TABLE 2
CHINESE STEEL PRODUCTION BY PROVINCE

<table>
<thead>
<tr>
<th>Province</th>
<th>2005 Production (Million MT)</th>
<th>Percent</th>
<th>Province</th>
<th>2005 Production (Million MT)</th>
<th>Percent</th>
</tr>
</thead>
<tbody>
<tr>
<td>Hebei</td>
<td>64.64</td>
<td>17.42%</td>
<td>Nei Monggul</td>
<td>7.48</td>
<td>2.02%</td>
</tr>
<tr>
<td>Jiangsu</td>
<td>43.28</td>
<td>11.66%</td>
<td>Fujian</td>
<td>7.3</td>
<td>1.97%</td>
</tr>
<tr>
<td>Liaoning</td>
<td>32.06</td>
<td>8.64%</td>
<td>Zhejiang</td>
<td>7.17</td>
<td>1.93%</td>
</tr>
<tr>
<td>Shandong</td>
<td>30.09</td>
<td>8.11%</td>
<td>Guangxi</td>
<td>5.15</td>
<td>1.39%</td>
</tr>
<tr>
<td>Shanghai</td>
<td>19.64</td>
<td>5.29%</td>
<td>Yunnan</td>
<td>4.8</td>
<td>1.29%</td>
</tr>
<tr>
<td>Tianjin</td>
<td>16.61</td>
<td>4.48%</td>
<td>Jilin</td>
<td>4.79</td>
<td>1.29%</td>
</tr>
<tr>
<td>Hubei</td>
<td>15.86</td>
<td>4.27%</td>
<td>Gansu</td>
<td>4.52</td>
<td>1.22%</td>
</tr>
<tr>
<td>Guangdong</td>
<td>13.66</td>
<td>3.68%</td>
<td>Shaanxi</td>
<td>3.37</td>
<td>0.91%</td>
</tr>
<tr>
<td>Shanxi</td>
<td>13.41</td>
<td>3.61%</td>
<td>Xinjiang</td>
<td>3.22</td>
<td>0.87%</td>
</tr>
<tr>
<td>Henan</td>
<td>13.37</td>
<td>3.60%</td>
<td>Chongqing</td>
<td>2.95</td>
<td>0.79%</td>
</tr>
<tr>
<td>Sichuan</td>
<td>11.73</td>
<td>3.16%</td>
<td>Heilongjiang</td>
<td>2.32</td>
<td>0.63%</td>
</tr>
<tr>
<td>Anhui</td>
<td>11.42</td>
<td>3.08%</td>
<td>Guizhou</td>
<td>2.15</td>
<td>0.58%</td>
</tr>
<tr>
<td>Jiangxi</td>
<td>10.18</td>
<td>2.74%</td>
<td>Qinghai</td>
<td>0.48</td>
<td>0.13%</td>
</tr>
<tr>
<td>Beijing</td>
<td>9.66</td>
<td>2.60%</td>
<td>Hainan</td>
<td>0.15</td>
<td>0.04%</td>
</tr>
<tr>
<td>Hunan</td>
<td>9.61</td>
<td>2.59%</td>
<td>Ningxia</td>
<td>0.09</td>
<td>0.02%</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>371.16</strong></td>
<td></td>
<td><strong>Total</strong></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

This degree of geographic fragmentation demonstrates, among other things, the extent to which the Chinese steel industry reflects the desire of provincial governments to have a steel industry, whether or not such an industry is economically viable. Indeed, as Ian Christmas, Secretary-General of the International Iron and Steel Institute, noted, “(e)ach region within China wishes to have its own steel industry.”18 As discussed below, local governments frequently pressure local banks to provide low-cost loans to lo-

---
eral steel companies to expand facilities. This has resulted in a significant expansion of capacity in inland China, mostly in the form of fairly small mills, far from China’s major markets and from the ports used to import iron ore in particular.19

**Government Ownership**

The second striking characteristic of the Chinese steel industry is the extent to which it remains state-owned, with state-owned enterprises accounting for 57 percent of total production.20 The Chinese government owns majority stakes in almost all of China’s major steel producers. The following table shows the state’s ownership interest in the ten largest Chinese producers.21 Even after consolidation, the expectation is that the Chinese government will continue to own a majority stake in nearly all of the “top 100” producers.22

<table>
<thead>
<tr>
<th>Producer</th>
<th>Government Ownership (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Shanghai Baosteel</td>
<td>85.41%</td>
</tr>
<tr>
<td>Anben</td>
<td>64.70%</td>
</tr>
<tr>
<td>Wuhan</td>
<td>75.81%</td>
</tr>
<tr>
<td>Shougang</td>
<td>81.19%</td>
</tr>
<tr>
<td>Maanshan</td>
<td>62.50%</td>
</tr>
<tr>
<td>Tangshan</td>
<td>61.31%</td>
</tr>
<tr>
<td>Jiangsu Shagang</td>
<td>0.00%</td>
</tr>
<tr>
<td>Jinan</td>
<td>76.60%</td>
</tr>
<tr>
<td>Laiwu</td>
<td>78.01%</td>
</tr>
<tr>
<td>Panzhihua</td>
<td>55.37%</td>
</tr>
</tbody>
</table>

---

19 Id.
22 China’s Small Steel Mills Feel Heat.
The Chinese government is comprised of three distinct levels: national, provincial, and local (county or municipal). Ownership of shares in a steel company may lie with any one of these levels. Government ownership of steel companies gives each level of government a vested interest in the industry, as well as the ability to direct steel producers to act in ways that further governmental rather than market aims, such as maximizing employment and tax revenues. Moreover, government decisions at each level can greatly benefit steel producers. For example, in January 2005, the Government of Hubei Province transferred 51 percent of the ownership of Ercheng Iron & Steel, a local steel producer, to Wuhan at no cost. In this way, Wuhan acquired some three million tons of new capacity at a cost of $0 per ton.

Future Expansion

Despite the enormous recent increases in capacity, it appears that the Chinese steel industry will continue to expand. The Chinese government has officially stated that it intends to have the Chinese steel industry reduce capacity slightly. China had approximately 414 million tons of steel-making capacity in 2005, and expects that capacity to fall to 400 million tons in 2010. To accomplish this reduction, the Chinese government plans to remove about 55 million tons of obsolete steel-making capacity from production.

However, at the end of 2005, 70 million tons of new steel making capacity was already under construction in China, and another 80 million tons of capacity was planned. This indicates that, even if China in fact closes the full 55 million tons of capacity targeted, capacity would actually increase to at least 429 million tons with the

---

26 Id. at 2.
27 Id.
28 Id. at 20.
completion of projects currently underway. This total would rise to 509 million tons if all planned projects are completed.

Despite the Chinese government’s announced intention to decrease capacity, individual Chinese producers continue to plan additional capacity. In 2004-2005, the Chinese government approved a $2.5 billion plant expansion for Maanshan Iron & Steel Company as well as a $2 billion expansion for stainless-steel maker Tauyuan Iron and Steel. In addition, China’s largest producer, state-owned Baosteel, announced plans for a new facility in Guangdong that will have an annual output of 20 million tons. Each project apparently involves significant levels of government support.29 The American Iron and Steel Institute estimates that the state-owned steel companies accounted for roughly $6 billion in capital expansion expenditures in 2002 alone – much of the capital presumably from the state.30

The fact that these mills are adding so much capacity at a time when China already suffers from overcapacity indicates that these investments are driven by government planning, not market forces. Indeed, despite calls to curb production as a result of growing excess capacity, these capacity expansions continue unabated even as steel profits plunge – by 74.6 percent year-on-year during the first two months of 2006.31 Moreover, according to the China Iron and Steel Association, its 66 member steelmakers saw net profit decrease by 10.6 percent in 2005, with the net profit margin rate declining from 8.1 percent to 6.5 percent.32 Such margins are well below 2005 global margins for steelmakers and constitute inadequate financial returns in what was likely the peak of the global steel cycle – further evidence that steel developments in China are not driven by market forces.

29 Letter from the American Iron and Steel Institute to Gloria Blue re: China’s Compliance with its WTO Commitments, at 6 (Sept. 6, 2005).
30 Written Statement for the Record of the American Iron and Steel Institute on United States-China Economic Relations Submitted to the House Committee on Ways and Means, 3 (Nov. 3, 2003).
Government Management of the Steel Industry

China's central government maintains a high degree of direction and decision-making authority over the development and management of the steel industry. The government has issued a number of industrial plans which specifically designate steel as a preferred industry and provide for a wide array of government benefits including grants, preferential loans and tax incentives. In addition, these plans provide for government management of nearly every major aspect of China’s steel industry, and permit – even mandate – the government to intervene directly and extensively in the steel industry.

China’s Steel Policy

In July 2005, the National Development and Reform Commission ("NDRC") issued China's new Steel and Iron Industry Development Policy ("Steel Policy"), which outlines the government's comprehensive policy for the steel industry. As a whole, the policy provides for the government's management of China's steel industry, including resource and equipment utilization, regional concentration of output, quality improvements, technological innovation, investment management, and consolidation. Article 20 specifically provides for the strategic reorganization of China's largest steel producers to create an industrial structure with two 30 million-ton steel groups and several 10 million-ton steel groups by 2010. 33 The policy further prescribes the number and size of steel producers, where they will be located, the types of products that are allowed to be produced, and minute details relating to the technology that will be used (e.g., size and composition of blast furnaces).

As described in detail below, the Steel Policy mandates direct government subsidization of the steel industry. For example, Article 16 specifically provides for government support in the form of "tax refunds, discounted interest rates, funds for research and other policy support for major iron and steel projects utilizing newly devel-

---

33 Steel and Iron Industry Development Policy, Order No. 25 of the National Reform and Development Commission, July 2005, (“Steel Policy”) at art. 20.
The China Syndrome: How Subsidies and Government Intervention Created the World's Largest Steel Industry

The policy also calls for indirect support by, among other things, restricting foreign investment, discriminating against foreign equipment and technology, and by providing various export credits. In short, China's Steel Policy is a primary example of the government's attempt to dictate industry outcomes and involve itself in decisions that should be made by the market.

The Five-Year Plans

China's industrial development is also directed and managed by the central government through its Five-Year Plans. Issued by the Central Committee of the Communist Party of China, the Five-Year Plans establish the broad parameters defining which industries, enterprises, and products should be targeted for preferential government support. According to the government, Five-Year Plans aim to “arrange national key construction projects, manage the distribution of productive forces and individual sector's contributions to the national economy, map the direction of future development, and set targets.”

The 10th Five Year Plan for National Economic and Social Development, covering the period 2001-2005, calls for “energetically optimizing and improving [the] industrial sector” by, among other things, enhancing traditional industries with new technologies and intensifying construction of transportation, energy and other infrastructure facilities. According to the plan, these measures are “most important in the energy [and] metallurgy” industries. The plan further calls for the “establishment of a number of large companies and enterprise groups through stock listing, merging, association and reorganization.” It also provides for the continued and pervasive role of the government in the economy, stating that the “state must hold a controlling stake in strategic enterprises that concern the national economy” and must also “uphold the dominance of

---

34 Id., art. 17.
37 Id.
38 Id.
the public sector of the economy [and] let the state-owned sector play the leading role.”

China’s new 11th Five Year Plan, covering the period 2006-2010, offers more of the same and is designed to “optimize and upgrade industrial structures.”

List of Encouraged Industries

The central government’s National Planning Commission periodically issues a “Catalogue of Key Industries, Products and Technologies the Development of Which is Encouraged by the State.” Essentially, this planning document lists key industries and products which are favored by the central government and therefore eligible for preferential treatment. The Catalogue lists “Iron and Steel” as a preferred or favored industry along with dozens of specific steel products. As a result, steel companies are eligible for various tax exemptions and reductions, including a 50 percent income tax reduction for companies that derive more than 70 percent of their revenues from manufacturing a product listed in the Catalogue. In addition, the Catalogue gives local authorities the discretion to issue policies that help promote the development of these industries.

Foreign Investment Catalogue

The government also maintains a “Catalogue for the Guidance of Foreign Investment Industries” which is issued jointly by the NDRC and the Ministry of Commerce (“MOFCOM”). The catalogue distinguishes between encouraged and discouraged industries, with discouraged industries further broken down into those where foreign investment is restricted and those where foreign investment is prohibited. Industries that are discouraged are generally those that are not in line with the central government’s national economic development goals. Encouraged industries include the “ferrous metallurgical industry” as well as products such as hot-rolled and cold-rolled steel plate.
Investors in encouraged industries are eligible for certain government benefits, including tax reductions and duty waivers.\textsuperscript{43}

DIRECT GOVERNMENT SUBSIDIES TO THE STEEL INDUSTRY

The Chinese steel industry would probably be a fraction of its current size without direct aid from the Chinese government. The Chinese government created the infrastructure of the Chinese steel industry, and has spent billions of dollars directly on it. Direct government assistance comes in the form of grants and other direct payments to Chinese steel producers, an undervalued RMB, and government intervention to control raw material and energy prices. In addition, the state-owned banks have forgiven billions of dollars in loans to steel producers and have repeatedly been willing to exchange unpaid debt for shares. As with other manufactured products, the Chinese government has a panoply of tax incentives that encourage production of exports.

Documenting Chinese subsidies to the steel industry is a difficult task. According to USTR, “a general lack of transparency makes it difficult to identify and quantify possible ... subsidies provided by the Chinese government. China’s subsidy programs are often the result of internal administrative measures that are not publicized.” Efforts to collect information about Chinese subsidy programs have been further frustrated because, until recently, China has failed to make any of its required subsidy notifications, a key requirement of the WTO Subsidies Agreement. Despite its flagrant disregard for international norms, China has paid no consequences for its “hide-the-ball” approach on subsidies.

Notwithstanding the lack of transparency, it is clear that the Chinese government plays a substantial role in assisting its steel industry. Indeed, direct subsidies are an integral part of China’s Steel Policy. Article 16 of the policy specifically provides for government subsidies in the form of “tax refunds, discounted interest rates, funds for research and other policy support for major iron and steel projects utilizing newly developed domestic equipment.” China’s stated commercial policies further confirm preferential government treatment, especially for state-owned enterprises (“SOEs”). As of September 2005, for example, the MOFCOM website reportedly states that it will exempt certain SOEs from “repayment of non-performing loans, and provide a debt-to-
equity swap policy. The policies will support firms’ trans-regional development, make good use of domestic and foreign trade development funds, provide subsidized interest for technical innovation loans, and accelerate infrastructure development.  

Not surprisingly, in a recent report on foreign trade barriers, USTR singled out Chinese subsidies to its steel industry as of particular concern, stating:

[Subsidies] take the form of income tax reductions or exemptions that are *de facto* contingent on export performance. … China’s subsidy programs can also take a variety of other forms, including mechanisms such as credit allocations, low-interest loans, debt forgiveness and reduction of freight charges. … Of particular concern are China’s practices in the textiles industry as well as in the steel, petrochemical, high technology, forestry and paper products, machinery and copper and other non-ferrous metals industries.  

As part of the WTO’s transitional review of China, member countries have confirmed ongoing Chinese industrial subsidies:

Based on available information, it appeared that China continued to provide tax incentives and preferential bank financing to producers of agricultural and industrial goods that were contingent upon export or the use of domestic over import goods, despite a clear commitment by China four years ago to eliminate all prohibited subsidies upon its accession to the WTO. It also appeared quite clear that China continued to provide subsidies to loss-making state-owned enterprises, despite making statements to this Committee in 2002 that these subsidies had been eliminated in 2001 …

---


46 Mar. 2006 NTE at 120. (emphasis added).

Government Grants to the Steel Industry

The Government of China continues to provide a number of direct government grants to the steel industry, including cash grants, energy and raw material grants, and land grants.

**Cash Grants**

In 2000, the Chinese government announced that it would spend $6 billion over several years to upgrade and transform its steel industry.\(^4^8\) The actual amount spent is believed to be much greater. At the time of the announcement, the Chinese Ministry of Commerce stated that the central government – in administering key investment projects – would likely direct local and provincial governments to give the steel industry priority with respect to land use, raw materials, transport, equipment, and water and power supplies.\(^4^9\)

China’s WTO subsidies notification identifies several programs for small medium-sized enterprises (“SMEs”) that may be providing direct grants to steel producers. These include funds for supporting technological innovation, development funds, and funds for exploration of international markets.\(^5^0\) Because of the number of small steel producers in China, a substantial portion of these subsidies could go to steel producers. In 2004 alone, China budgeted RMB 1.6 billion for these grants.\(^5^1\)

Cash grants are also provided by the government to promote increased exports of steel products. In a recent countervailing duty case brought against China, Canadian authorities identified actionable subsidies in the form of direct grants provided by the Government of China to steel and other manufacturing industries for export performance. The Canadian government cited benefits to the steel industry in the form of direct

---


\(^{49}\) Id.

\(^{50}\) China Subsidies Notification at 35-37.

\(^{51}\) Id.
grants to enterprises satisfying export criteria as well as grants to enterprises to assist in expanding export sales.52

In addition, China continues to offer grants and tax subsidies to state-owned enterprises which are operating at a loss.53 In reports to the WTO, the Chinese government has identified the following industries as benefiting from these subsidies: metallurgical, ferrous-metal, machinery, coal, oil, chemical, textile, tobacco, and others.54 China has promised to eliminate these subsidies on numerous occasions, but has yet to follow through on its commitments. In 2000, pursuant to Annex 5B of the Protocol of Accession to the WTO, China committed to eliminating “subsidies provided to certain state-owned enterprises which are running at a loss.”55 During China’s 2002 transitional review, the Chinese representative informed the WTO that these subsidies had been eliminated in 2001. However, subsequent Chinese press reports indicate that the government was working to eliminate these subsidies by 200556 – with still no sign that these subsidies have ceased.

Energy and Raw Material Grants

The government also provides grants in the form of assistance with energy, raw material and other input costs. According to a March 2006 Steel Business Briefing report, the Beijing-headquartered steel company, Shougang, recently signed an agreement with the Shanxi government in northern China to help restructure the steel industry in that province. Shougang is expected to assist in the ongoing restructuring and up-

52 Statement of Reasons Concerning the Making of a Final Determination With Respect to the Dumping of Certain Carbon Steel and Stainless Steel Fasteners Originating in or Exported From the People’s Republic of China and Chinese Taipei and the Making of a Final Determination With Respect to the Subsidizing of Certain Carbon Steel and Stainless Steel Fasteners Originating in or Exported From the People’s Republic of China and Chinese Taipei, Nos. 4243-38, 4218-17, AD/1308, CVD/103, at 40-41 (Dec. 24, 2004) (hereinafter “Canada Statement, Nos. 4243-38, 4218-17, AD/1308, CVD/103 (Dec. 24, 2004)”). While this case involved steel fasteners, many of the subsidy programs found by the Government of Canada and cited in this paper are granted to manufacturers of other steel products and are also indicative of the types of subsidies granted to both upstream and downstream manufacturers.


54 Id.

55 Id.

56 Id.
grading of the region’s steel industry. In return, the provincial government has pledged to provide the necessary coking coal and iron ore for Shougang’s steelmaking operations – presumably free of cost. In addition, the Chinese government grants subsidies to Chinese steel companies to help defray costs derived from overseas steel input operations. The Chinese government recently granted Jiangsu Sha Steel Group 1.3 billion RMB in subsidies for its iron mine project in Australia.

The government also provides raw materials and other inputs at no cost or below market cost. Water, for example, a scarce commodity in most of China, was provided free by the state until recently. Now, water costs as little as $0.16 per cubic meter in China (compared with $2.50 in the United States), reflecting neither the cost of delivery nor the scarcity of the water.

**Land Grants**

Chinese steel companies continue to benefit from land grants or reduced land costs provided by the government. In a recent countervailing duty case involving steel fasteners from China, the Canadian government found that certain companies located in Special Economic Areas pay reduced long-term land use fees for land on which factories are located. Beyond this, by law, all land in China remains the property of the state. Without a market for land, it is impossible to determine whether Chinese steel producers are paying market rates for their land. Shanghai Baosteel, the largest Chinese producer, shows deferred expenses of 1.689 million RMB, or about $200,000, for “transfer price for land use rights & site formation fee.” The fee for 2004 was 187,724 RMB. If this figure in fact represents the company’s long-term cost for land, it would appear to be far below any market value. For the whole industry, below-market rents

---

62. *Id.*
for land represent a subsidy worth tens of millions of dollars to the Chinese steel industry per year.

**Transfers of Ownership**

As part of its role in directing the consolidation and restructuring of the steel industry – as set out in China’s Steel Policy – the Chinese government has encouraged and even induced various mergers and acquisitions within the steel industry through cash grants and grants of ownership interest. For example, in January 2005, Wuhan Iron and Steel Group was offered a 51 percent stake in Ercheng Iron and Steel at no cost, to encourage the merger. Ercheng had crude steel output of 3 million metric tons and profit of 20 million RMB in 2004. The contribution of profitable assets at no cost is a clear subsidy.

**Debt-to-Equity Swaps**

Debt-to-equity swaps are another tool utilized by the Chinese government to prop up state-owned enterprises through direct government infusions of cash. This tool serves essentially as a grant-giving operation. Since 2000, 37 different Chinese steel companies have benefited from debt-to-equity swaps worth at least $8.4 billion as part of the government’s plan to restructure and consolidate the steel industry. Two of China’s largest steel producers, Shanghai Baosteel and Anshan, both benefited from this process. In both cases, non-performing loans to the company were transferred from state-owned banks to state-owned bank asset management companies ("BAMCs"). The BAMCs then exchanged the debt for shares in the companies. The OECD reported that these transactions involved “substantial reductions in debt loads in return for restructuring arrangements whose details have not been fully revealed.”

---

64 See Letter to Gloria Blue, *supra* at 5; China’s Iron/Steel Industry to See M&A Activity, Asia Times Online, Aug. 24, 2005.
Similarly, Xingang Steel was established in 2000 through a debt-to-equity swap in which several of China’s BAMCs purchased non-performing loans and then injected capital into the steel company.\textsuperscript{66} Other, smaller producers have also benefited; in 2000, for example, Valin Lianyuan Steel Corp., a small producer in Hunan province, successfully converted RM740 million in debts into equity.\textsuperscript{67}

These massive cash infusions continue to benefit the Chinese steel industry today. More importantly, recent press reports indicate that the government continues to provide the steel industry assistance in the form of cash grants and debt-to-equity swaps. The \textit{Asia Times Online} reports that China’s iron and steel companies have benefited in the amount of 11.19 billion yuan from debt-to-equity swaps as part of the government’s plan to restructure and consolidate the steel industry in the years leading up to 2005.\textsuperscript{68}

\textbf{Debt Forgiveness and Inaction Regarding Non-Performing Loans by State-Owned Banks}

Another form of direct government assistance to the steel industry is the forgiveness of or inaction regarding non-performing loans by China’s state-owned banks. This provides a direct subsidy to the recipients in the amount of the debt forgiven. WTO members have raised concerns regarding China’s “automatic roll-over of unpaid principal and interest, forgiven and non-performing loans, and the selective use of below-market interest rates.”\textsuperscript{69} These forms of assistance were cited as direct financial contributions provided by China’s state-owned banks to Chinese industry.

The Government of China continues to channel financing to preferred industries, including steel, based on policy considerations instead of market-based factors. The result is a high level of non-performing loans and repeated bailouts of China’s state-

\begin{flushleft}
\textsuperscript{66} See Debt-to-Equity Swap Brings Economic Results to Steel Firm, People’s Daily Online, June 7, 2001, \url{http://english.people.com.cn/200106/07/eng20010607_71985.html}.


\textsuperscript{68} China’s Iron/Steel Industry to See M&A Activity, Asia Times Online, Aug. 24, 2005.

\textsuperscript{69} \textit{WTO} No. G/SCM/Q2/CHN/8, at 3 (Oct. 6, 2004).
\end{flushleft}
owned banks. Loans are generally classified as non-performing when the borrower fails to pay interest and principal according to the original terms of the loan. Standard & Poor’s estimates that 40 percent of China’s state-owned banks’ loans – or roughly $800 billion – are non-performing. Other estimates indicate that “borrowers may default on as much as half of [the] loans issued by state banks.”

Under China’s Northeast Revitalization Program, industries in the country’s industrial northeast region are benefiting from debt forgiveness on a large scale. As detailed above, much of China’s steel is produced in this region. Under this program, China has carried out “strategic restructuring and technical transformation of key enterprises in the areas of oil, petrochemical, iron and steel, automotive, shipbuilding and aircraft products manufacturing sectors in Northeast China in a bid to establish production bases of advantage industries.”

The high level of non-performing loans is evidence that state-owned banks continue to loan to enterprises, including steel companies, that are uncreditworthy and that would not meet normal market-based credit terms. The Tieben steel project in Jiangsu province, for example, resulted in non-performing loans worth billions of yuan. The staggering level of non-performing loans has left the state-owned banks virtually insolvent. As a result, the Chinese Government has been forced to repeatedly inject cash into these banks; in 2003, the government recapitalized the Bank of China and the China Construction Bank with an injection of $45 billion of reserves. To date, the cen-

---


71 Id. Statistics released by China’s Banking Regulatory Commission indicate that in the first half of 2004, China’s major state-owned banks held more than $200 billion in non-performing loans — an undoubtedly conservative estimate given the unreliability of the Commission figures and because the figure likely does not include the billions of dollars of non-performing loans the state-owned banks have sold to state-owned asset management companies. See China Gov’t Warns of Possible Rebound in Non-Performing Loans, Asia Pulse, Sept. 20, 2004. For example, in June 2004, the Bank of China and the China Construction Bank sold nearly 280 billion yuan ($33.7 billion) in non-performing loans to a state-owned asset management company.


73 WTO No. G/SCM/Q2/CHN/14, at 2 (Sept. 29, 2005).

74 China Gov’t Warns of Possible Rebound in Non-Performing Loans, Asia Pulse, Sept. 20, 2004.

75 See Reform of China’s Banks, Burdened by Bad Loans, Is Priority for Government.
Central government is estimated to have spent more than $250 billion since 1998 to bail out the four primary state-owned banks.\textsuperscript{76} Standard & Poor’s estimates that these banks will require an additional $190 billion in the next several years just to stay afloat.\textsuperscript{77}

The steel industry is, of course, not the only beneficiary of China’s lax credit policies. However, the Chinese steel industry could not have added capacity on the scale it did between 2000 and 2005 absent massive loans. Without access to the records of the state-owned banks, asset management companies, and other lenders, it is impossible to know the full extent to which the Chinese steel industry has benefited from the Chinese government’s willingness to tolerate non-performing loans. Given the industry’s level of borrowing, though, it is reasonable to conclude that the benefit to the industry runs into the billions of dollars.

\textbf{Preferential Loans and Directed Credit from State-Owned Banks}

China’s banking system is dominated by the four state-owned banks – the Industrial and Commercial Bank of China, the Bank of China, the China Construction Bank, and the Agricultural Bank of China – which account for over 60 percent of all loans.\textsuperscript{78} Traditionally, these banks have made loans based on political directives from the central or provincial governments, rather than creditworthiness or other market-based factors. These “policy loans” generally have gone to state-owned enterprises and to industries favored by the government, including steel.\textsuperscript{79} Currently, state-owned enterprises account for 25 percent of China’s GDP, but receive over 65 percent of loans from state-owned banks.\textsuperscript{80} Moreover, the government has channeled its finances to preferred in-

\begin{itemize}
\item \textsuperscript{76} \textit{WTO No. G/SCM/Q2/CHN/14}, at 3 (Sept. 29, 2005).
\item \textsuperscript{78} Luo Ping, \textit{Challenges for China’s Banking Sector and Policy Responses} (Nov. 14-16, 2003).
\item \textsuperscript{79} See Reform of China’s Banks, Burdened by Bad Loans, Is Priority for Government. A recent IMF report concludes that “banks remain exposed to several sectors that are likely over invested, such as steel, cement, aluminum, and construction and, are therefore vulnerable to an economic slowdown and/or consolidation in these sectors.” Richard Podpiera, \textit{Progress in China’s Banking Sector Reform: Has Bank Behavior Changed?}, No. WP/06/71, at 11 (Mar. 1, 2006).
\item \textsuperscript{80} See Reform of China’s Banks, Burdened by Bad Loans, Is Priority for Government.
\end{itemize}
dustries at extremely low, non-market interest rates. These preferential loans, granted on non-commercial terms to inefficient state-owned companies, have subsidized the steel industry and have given the industry an unfair advantage on the market.

Today, both private and state-owned Chinese steel companies continue to have access to subsidized financing from state-owned banks that have a strong incentive to lend to preferred industries such as steel. Indeed, China’s Steel Policy specifically provides for export credits for steel companies. Article 27 of the policy states:

The state encourages and will provide export credit and other support for enterprises engaged in the production of steel and related production equipment to trade or transfer technology by exporting superior domestic technologies and metallurgical equipment sets.

Moreover, a WTO report issued in November 2005, summarizing the findings of member countries with respect to China’s obligations under its accession agreement, identifies state support to various industries through the banking system, mainly “in the form of policy loans, the automatic roll-over of unpaid principle and interest, forgiven and non-performing loans and the selective use of below-market interest rates.” Member countries concluded that China continues to provide “preferential bank financing to producers of agricultural and industrial goods, despite a clear commitment by China four years ago to eliminate all prohibited subsidies upon its accession to the WTO.” The report singles out China’s Northeast Revitalization Program, finding that China’s state-owned banks continue to extend “subsidized financing for large-scale investment projects in China which were designed to increase the competitiveness of state-owned enterprises, particularly in the Northeast, in industries such as oil and gas,

---


82 These state-owned banks are, in essence, acting as the government when they provide loans. Indeed, according to the Working Party Report on China’s accession to the WTO, “when state-owned enterprises, including banks, provide financial contribution they are doing so as government actors.” Thus, to the extent that the loans are being provided on preferential or below market rates, they constitute a subsidy. See *WTO No. G/SCM/118* (Nov. 9, 2005) at 12.

83 *Id.*

84 *Id.* at 3.
petrochemicals, iron and steel, and ship-building.” Furthermore, the WTO cites a report on the MOFCOM website claiming that the Dalian Branch of the Export-Import Bank would provide RMB 5 billion in export credits to companies in northeast China to enter global markets. According to the report, MOFCOM states that, since November 2003, “low-cost credit provided by the bank has saved the enterprises [RMB] 150 million interest.”

That China’s non-commercial lending practices continue today, despite its assurances to the contrary, has been asserted by numerous WTO members. In a September 2005 WTO communication, for example, the U.S. delegation concluded that:

Bank lending on terms inconsistent with commercial consideration has continued unabated and government bailouts of the banks have grown over time in frequency and magnitude. Since 1998, these banks collectively have reportedly benefited from repeated government capital injections and non-performing loan purchases in excess of $250 billion.

The U.S. delegation further stated that:

State-owned banks continue to make policy-driven loans that are not commercially justified, and when those loans fail, the loans are written-off and passed to the asset management companies to be dealt with. The recent inauguration of Huida Asset Management Ltd., set up to specifically deal with the non-performing loans of the state-owned People’s Bank of China is one such example.

In its 2005 report to the U.S. Congress, the U.S.-China Economic and Security Review Commission determined low and no-cost financing to be “one of the most pervasive forms of subsidies in the Chinese economy.” It stated:

This system of ‘policy lending’ whereby capital is allocated for political or strategic reasons using subsidized interest rates and other noncommercial terms arguably amounts to a massive government subsidy for Chinese firms that is

---

85 Id.
86 Id.
87 WTO No. G/SCM/Q2/CHN/14, at 3 (Sept. 29, 2005).
88 Id.
used both to bolster their operations and to fund acquisitions.90

Chinese steel companies have benefited significantly from subsidized loans. For example, in 2005, the state-owned China Development Bank agreed to provide Anshan Steel Group (now Anben) with RMB 10 billion (US$1.2 billion) in preferential policy (i.e., subsidized) loans.91 The same year, Handan Iron & Steel Group received interest-subsidized loans from the government worth RMB 2.4 billion (US$300 million) to fund a 1.3 million ton cold-rolled steel sheet project.92 In 2005, Baosteel, China’s largest steel producer, funded one-half of the RMB 10 billion cost of a new stainless steel production facility with subsidized loans from state-owned banks.93

Subsidized loans are playing a major role in capacity expansion in the Chinese steel industry for small as well as large producers. In December 2005, the Export-Import Bank of China – a bank that extends export credits under the direct leadership of the government – signed an agreement with Hunan Valin Steel & Iron Group for $619 million to support its exports and its overseas operations.94 Valin had already obtained RMB 3.0 billion in discounted loans in 2002. As a result of these discounted loans, production at Valin was projected to reach 9 million tons in 2005, so that it can no longer be considered a small producer.95

China’s policy of subsidizing the acquisition of strategic assets by state-owned enterprises was highlighted in the recent dispute over the attempted takeover of Unocal Corp. by the Chinese oil company Cnooc Ltd. Cnooc’s loan package was heavily subsidized and included a $6 billion loan from a state-owned bank as well as a $7 billion loan from its parent company, China National Offshore Oil (100 percent owned by the

90 Id.
94 Briefing – Asia Banking, Asia Pulse (Dec. 21, 2005).
95 See A Remarkable Leap in the Industrial Revitalization of Hunan.
The loan from its parent company consisted of $2.5 billion at zero interest and $4.5 billion at 3.5 percent interest per year. All interest payments would have been waived if Cnooc’s credit rating fell below a certain level – hardly the terms that would accompany a commercial loan in a free market.

Finally, in the recent steel fasteners case, the Canadian government found actionable subsidies in the form of preferential loans and loan guarantees by the Government of China. Specifically, the Canadian authorities found the existence of preferential interest rates and financing terms provided, either directly by the Government of China or indirectly through financial institutions, to companies satisfying certain export-contingent criteria. They also found that loans provided to certain manufacturers, including steel companies, satisfying export-contingent or other criteria are being guaranteed by the Government of China or other state-run financial institutions.

China’s policy of preferential loans to favored industries is further evidenced by the devastation these policies have created in its banking system – specifically the high level of non-performing loans detailed above and the numerous bailouts of the state-owned banks. Indeed, the Chinese government has been forced to provide massive subsidies to the state-owned banks and the state-owned enterprises to which they lent simply to keep them afloat, despite China’s contention that these banks and enterprises operate on a commercial basis and are responsible for their own profits and losses. As noted above, in 2003 the central government injected $45 billion into the Bank of China and the China Reconstruction Bank from its foreign reserves. In May 2005, the central government injected another $15 billion of foreign exchange reserves into the Industrial and Commercial Bank of China, which in April 2005 had acknowledged that approximately 20 percent of its loans were non-performing.

---

98 WTO No. GSCM/Q2/CHN/8, at 3 (Oct. 6, 2004).
99 WTO No. G/SCM/Q2/CHN/14, at 4 (Sept. 29, 2005).
Tax Incentives Provided to the Steel Industry

The central, provincial, and local Chinese governments provide a variety of tax exemptions, reductions, and credits which directly benefit the steel industry. This is the one area for which the recent Chinese subsidies notification to the WTO provides some detail. These programs, detailed below, provide a financial contribution to the steel industry in the form of foregone revenue by the Chinese government.

**China’s Tax Policies**

China’s tax policies mandate tax incentives for specified industries, including steel. Article 16 of China’s Steel Policy specifically provides for government support in the form of “tax refunds … and other policy support for major iron and steel projects.” Moreover, China’s Catalogue of Industries, Products, and Technologies To Be Encouraged for Development on a National Level identifies the steel industry and roughly 30 different steel products as an industry/products to be encouraged. Industries and products identified in the Catalogue receive a wide variety of benefits, including an exemption from Customs duties and VAT on imported equipment used in the production process. In addition, a 50 percent corporate income tax reduction is offered to those companies that derive more than 70 percent of their revenues from manufacturing products listed in the Catalogue.

As described in greater detail below, China’s tax policies also provide incentives for export-oriented production and for Foreign Invested Entities.

**Tax Incentives for Firms in Special Economic Areas**

The Government of China provides a complex system of tax and other financial incentives to manufacturers operating in Special Economic Areas (SEAs) such as Special Economic Zones (SEZs), High Technology Industrial Development Zones, Export Processing Zones, free ports, bonded zones, and the like. These SEAs promote investment with unique tax packages and other incentives, many of which benefit the steel industry. The incentives generally include significant reductions or exemptions in

---

national and local income taxes, land use fees, import and export duties, and priority treatment in obtaining basic infrastructure services. The government has also created special incentives for projects involving export-oriented investments and for certain industries including steel.

For example, the Jiangsu Yangtze International Metallurgical Industrial Park in Zhangjiagang City, an industrial park composed primarily of steel companies, advertises the following tax incentives for foreign-funded manufacturing companies: a corporate income tax exemption in the first two profit-making years and a 50 percent reduction in the third-to-fifth profit-making year; local income tax exemptions; a VAT exemption for exported products; exemption of VAT and customs duties on equipment used in the manufacturing process; and a full refund of income taxes paid on profit which is reinvested in export-oriented enterprises.

Other industrial parks and development zones offer even more attractive tax packages. One high-tech industrial park boasts tax-free status for the first five years, starting from the day of registration, followed by a 50 percent reduction in income tax for the second five-year period. The same park offers a 25 percent refund of paid VAT for 7 years and an exemption from operations taxes for the first 3 years, starting from the day of registration. Such benefits are indicative of those granted to steelmakers in similar parks.

China’s subsidies notification identifies preferential tax policies for enterprises recognized as high or new technology enterprises established in the high or new technology industrial development zones. Enterprises located in such areas pay a 15 percent income tax rate and are exempt from income tax for their first two years.

The China Association of Development Zones cites additional tax incentives, including the following:

103 Id.
106 China Subsidies Notification at 10.
• **Loss compensation schemes** whereby any losses experienced by companies in development zones can be offset through reductions in income taxes for a period of 5 years after the loss is incurred.\(^{107}\)

• **Regional tax incentives** whereby companies in specified regions, including the "Middle Western Areas," are eligible for a 15 percent reduction in income tax after the original exemption-reduction period is over.\(^{108}\)

• **Export-oriented tax incentives** whereby taxes are reduced by as much as 50 percent for export-oriented enterprises which export 70 percent or more of their total annual output.\(^{109}\)

The amounts of such subsidies can be substantial, if not huge. Hangzhou Iron & Steel Co., for example, reported that one of the company's subsidiaries received subsidies worth RMB 1.14 million from the Ningbo Daxie Development Finance & Tax Bureau.\(^{110}\)

**Tax Benefits for Foreign Invested Entities**

The Chinese government provides a variety of tax exemptions and reductions for Foreign Invested Entities (FIEs) that are export-oriented. Indeed, China's subsidies notification identifies no fewer than nine different tax programs that benefit enterprises with foreign investment.\(^{111}\) According to China's Income Tax Law, enterprises invested in and operated by foreign businesses that export more than 70 percent of their annual output receive a 50 percent reduction in corporate income taxes after the period income tax exemption has expired.\(^{112}\) Thus, export-oriented FIEs receive an income tax exemption in the first two profit-making years and an income tax reduction of 50 percent in

\(^{107}\) See National Development Zones.

\(^{108}\) *Id.*

\(^{109}\) *Id.*


\(^{111}\) See China Subsidies Notification at 1-17.

the following three years. After the five year period, an export-oriented FIE may be eligible for additional tax reductions depending on its location.\textsuperscript{113}

FIEs that are not export-oriented are also eligible for corporate income tax reductions, depending on their location and industry. Article 7 of the Income Tax Law of the People’s Republic of China on Enterprises with Foreign Investment and Foreign Enterprises provides in part:

The income tax on enterprises with foreign investment established in Special Economic Zones, foreign enterprises which have establishments or places in Special Economic Zones engaged in production or business operations, and on enterprises with foreign investment of a production nature in Economic and Technological Development Zones, shall be levied at the reduced rate of fifteen percent.

The income tax on enterprises with foreign investment of a production nature established in coastal economic zones or in the old urban districts of cities where the Special Economic Zones or the Economic and Technological Development Zones are located, shall be levied at the reduced rate of twenty-four percent.\textsuperscript{114}

Additional tax incentives provided to FIEs include:

- A refund of either 100 percent or 40 percent of the income tax paid on the amount reinvested (depending on whether the reinvestment was in an export-oriented business) for FIEs that reinvest their profits in their China-based business.\textsuperscript{115}

- An exemption from a 5 percent business tax that typically applies to technological transfers such as intangible assets, patents, and copyrights.

- A VAT rebate on purchases of domestic machinery and equipment by FIEs.

\textsuperscript{113} ld.


\textsuperscript{115} ld. art. 10.
• An income tax exemption or reduction for dividends, interest, rents, franchising fees and other forms of income derived from sources in China by FIEs.

**Tax Benefits for Specific Regions**

Tax benefits are also available for enterprises located in specific regions. China’s subsidy notification identifies special tax benefits for enterprises located in, among others, the western regions and poverty stricken areas.\(^{116}\) Steel producers in various regions, such as Baotou Iron & Steel Group, have benefited from such programs.\(^{117}\)

**Tax Subsidies Identified as Actionable by the Canadian Government**

In a recent countervailing duty case involving carbon steel and stainless steel fasteners from China, the Canadian government identified numerous tax credits, refunds, and exemptions granted by various levels of the Chinese government to the steel industry. These subsidies, which were found to be actionable, included:

• Reduced rate of tax on corporate income for companies that have a significant volume of export sales.

• Exemption from and further reduction of income tax for companies operating in special economic areas during a designated start-up period (usually five years).

• Eligibility of companies located in Special Economic Areas (SEAs) for rebate of corporate income tax paid when profits are re-invested within the SEA.

• Exemption or reduction of sub-provincial income taxes for certain foreign invested enterprises located in SEAs.

• Exemption of duties and taxes on imported machinery and other inputs for use in production of subject merchandise.

---

\(^{116}\) China Subsidies Notification at 18-19.

Subsidized Targeted Infrastructure Development

Special Economic Areas and Industrial Parks

The Chinese government subsidizes the steel industry by financing and building, in whole or in part, industrial parks and other Special Economic Areas (SEAs). An investment guide for Jiangsu Yangtze International Metallurgical Industrial Park in Zhangjiagang City highlights the purpose and purported virtues of these industrial parks. This particular park was approved by the government of Jiangsu Province in 2003 and is primarily dedicated to the steel industry. The park is located on 40 square kilometers close to the Yangtze River’s deep-water coastline. There are currently 27 foreign-owned companies, including POSCO and Hyosung from South Korea, and 40 Chinese companies, including Shangang and other steel companies. The park “seeks to establish the first 10 million ton metallurgical industrial base and the biggest steel sheet production based in Jiangsu province with the annual sales 9.5 billion US$ in 5 years and 15 billion US$ in ten years.” In 2005, the annual production capacity of the park was expected to be 12.5 million tons of raw steel and 10 million tons of rolled steel.

The industrial park offers “complete infrastructure facilities,” presumably financed and built by the provincial government. The investment guide boasts completed and ready to deliver water supply (tap, industrial, and soft water), water drainage, sewage, power supply, steam supply, road networks, telecommunication systems, fuel gas (with natural gas transported from western China), industrial gas (such as oxygen nitrogen, argon and helium), and leveled land plots. According to the guide, twelve 10,000-ton level wharfs have been built on the Yangtze River and another seven are under construction. The guide also states that “manufacturing projects, which are in accord with the general design of Yangtze International Metallurgical Industrial Park and industry guide will enjoy various fiscal support provided by the Administrative Commission of the Park.”

Additional services promised to investors include:

- “Maximum preference” on land use and price;

---

119 Id. at Brief Introduction of Metallurgical Industrial Park.
Water and power supplied to the facilities;

Financial services, including the provision of working capital in a timely manner. A company can get a loan from the bank by mortgaging the land use right of the state-owned land it receives;

Port services, including round-the-clock Customs service for certain products;

Living communities for foreign investors which include medical treatment and education facilities. The park includes a foreign language school offering primary and secondary education. Children of overseas investors are promised priority in enrollment; and

Consultation and/or training for foreign investors in the applicable laws, regulations and policies, and preparation of all necessary documents and materials for setting up and registering the enterprise.

The Jiangsu Yangtze Industrial Park is not alone in providing incentives to industrial enterprises to promote growth. Industrial parks are sprouting up throughout the country offering similar benefits. For example, a park in Baotou promises, among other things, financial support, a loan guarantee fund, a guaranteed water supply, a “special zone rate for electricity,” and a steam production facility. An industrial park devoted almost exclusively to the steel industry, Baoshan International Steel Logistics and Service Park, is expected to be completed in 2006. The park is expected to attract over 500 international steel manufacturing, services, and trading companies and will likely offer similar incentives to those described above.

Finally, the Canadian government has identified Special Economic Area incentives as actionable subsidies. It found that certain incentives were “[a]vailable to [steel] manufacturers operating in regions such as economic and technical development zones, export processing zones, bonded zones and high-technology industrial devel-

---

120 Investment Promotion, Baotou National Rare Earth Hi-Tech Industrial Development Zone.
opment zones.” It identified the following benefits, either granted outright or contingent on export performance: special land use and investment exemptions, and preferential costs of services and infrastructure provided by government agencies or state-owned enterprises.123

The Northeast Revitalization Program

The Government of China has undertaken an industrial revitalization program which provides “potentially unfair advantages to businesses locating to or operating in Northeast China.” Starting in 2003, China’s central government has carried out a plan to resuscitate the old industrial base in the three northeastern provinces of Heilongjiang, Jilin, and Liaoning, aiming to build the region into a world-class industrial base. Together, these provinces account for about 10 percent of China’s steel production.126

As described by China’s State Property Commission, under this program China is executing a “strategic restructuring and technical transformation of key enterprises in the areas of oil, petrochemical, iron and steel, automotive, shipbuilding and aircraft products manufacturing sectors in Northeast China in a bid to establish production bases of advantage industries.” One of the stated aims of the program at the outset was to increase the competitiveness of Anshan Iron and Steel. In support of the Northeast Revitalization Program, the central government has offered preferential policies and financial support to industry, including tax incentives and low-interest rate financing.129

---

123 Id.
124 WTO No. G/SCM/Q2/CHN/14, at 2 (Sept. 29, 2005).
126 See Table 2, supra.
127 WTO No. G/SCM/Q2/CHN/14, at 2 (Sept. 29, 2005).
129 See China’s Old Industrial Base Eyes Bright Future With Ambitious Plan.
Government Intervention in Raw Material Prices

China lacks adequate domestic supplies of many of the key raw materials that are necessary for steel production, especially iron ore and steel scrap. To remedy this situation, the Chinese government is implementing a deliberate strategy of locking up long-term supply through a combination of subsidized foreign investments and long-term contracts with foreign suppliers. The effect of this strategy has been to drive up prices for these inputs worldwide. Now that China has established itself as an indispensable customer of the major raw material suppliers, though, the Chinese government is threatening to cap import prices of iron ore, a key input. China also restricts exports of coke, another major input, keeping its domestic price artificially low.

The Chinese Government and Raw Materials for Steel

Until the economic reforms of the past two decades, the Chinese government controlled all domestic prices in China, including prices for iron ore and coke. In many ways, the actual price levels were irrelevant, as China’s steel mills produced according to a central plan rather than in response to the market. The government no longer directly controls prices for steel inputs, but it does affect them in ways that have the end result of making iron ore and coke available to Chinese producers at prices below what they would otherwise be.

As explained above, the Chinese government continues to own a majority of the Chinese steel industry. China’s largest iron ore producers, including Anshan Mining Co. and Shoudu (Capital) Mining Co., are primarily state-owned. In addition, iron ore producers are part of larger corporate groups that also produce steel. All of these assets were originally 100 percent state-owned, and were “contributed” to enterprises. Even after the economic reforms of the 1980s and 1990s, the enterprises were never required to pay for these assets. In this way, the Chinese steel industry was essentially given not just China’s domestic iron ore reserves, but the equipment needed to exploit those reserves. This original gift continues to provide huge benefits to the Chinese steel industry, as it has not incurred the significant capital costs associated with the development and exploitation of iron ore reserves.

Because iron ore producers are normally linked to steel producers, relatively little iron ore in China is actually traded. Steel producers can assign their internal iron ore
supplies a lower price than would occur in a free market, because neither the steel pro-
ducers nor the iron ore suppliers incurred the capital costs associated with the discovery
and ownership of iron ore reserves. Moreover, because both the iron ore producers
and the steel producers are mostly state-owned, the Chinese government can ensure
that domestic iron ore prices are set at levels that ensure the profitability of steel pro-
ducers and, as importantly, the continuing expansion of the steel industry. In this way,
the Chinese government and the Chinese steel industry can manipulate the price of this
key input to their mutual advantage.

The government also seeks to manipulate the price of iron ore and other raw ma-
terials through import licensing schemes. In May 2005, for example, the Chinese gov-
ernment began imposing new import license procedures for iron ore. China reportedly
restricted licenses to 48 traders and 70 steel producers and failed to make public a list
of the qualified enterprises or the qualifying criteria used – violations of the WTO Import
Licensing Agreement.130 It did so in an attempt to control the price of iron ore and insu-
late this critical raw material from market forces.

**Government Intervention in Import Negotiations**

Although China is the world’s largest producer of iron ore, by tonnage, Chinese
iron ore reserves have a relatively low iron content. This has forced China to import
large quantities of iron ore, primarily from Australia, Brazil, and India. In 2004, China
imported 208 million tons, or slightly less than one-third of total world imports. Imports
for full year 2005 exceeded 275 million tons, and should exceed 300 million tons by
2006. Iron ore imports in the first two months of 2006 were 51.5 million tons, an in-
crease of 37 percent from the previous year.131 The Chinese steel industry is heavily
dependent on imported iron ore. Accordingly, a sharp increase in iron ore prices would
have an immediate negative effect upon the industry.

The Chinese government exhibited its willingness to intervene in international
markets on behalf of its steel industry when precisely such a sharp increase appeared
likely in the early part of 2006, as Chinese steel producers began negotiations with Aus-

---

130 United States Trade Representative, 2005 Report to Congress on China’s WTO Compliance 25
(Dec. 11, 2005).
Australian and Brazilian iron ore suppliers. Initially, the Chinese government attempted to control the negotiations by limiting participation to a single Chinese steel producer, Shanghai Baosteel. The avowed purpose of this move was to impose discipline on the Chinese industry in the negotiations. Some sources subsequently reported that China would effectively cap imported iron ore prices by refusing to approve import permits for shipments above the cap price ($54/ton for Australian ore and $70/ton for Brazilian ore). The Chinese government also indicated that it was considering reducing the number of importers allowed to bring iron ore into China so that it could exert greater control over iron ore imports. The Chinese government made its goal clear in a statement by the Ministry of Commerce and the National Development and Reform Commission, as an official stated that:

(Iron ore was the main raw material of steel and iron production, price of iron ore was directly related to the development of steel industry and all sectors of national economy. China’s steel industry was in a very difficult position that cost was rising, profit was decreasing and price of iron ore was increasing again. The Chinese government had taken measures to further enhance the control to the utilization of imported iron ore, accorded with national industrial policies, supported eliminating and outdated system and restrained over-fast growth of production capacity of iron ore. The unreasonable demand for iron ore will be further reduced. Chinese government will pay close attention to the negotiation process of iron ore price, and take necessary measures to avoid damaging interests of the nation and enterprises if price set is unreasonable and unacceptable to China.

Ultimately, the Chinese government’s attempts to limit iron ore price increases were unsuccessful, as the Chinese producers agreed to price rises of 19 percent for iron ore lumps and fines (although the price for pellets dropped). Nonetheless, the Chinese government is planning to “strengthen its monitoring” of iron ore imports “in a move expected to increase pressure on miners as they seek to finalize yearly supply

136 CVRD, Rio Tinto Also Settle Iron Ore Prices with China, The Tex Report (June 23, 2006).
contracts with steelmakers. From these steps, it is plain that the Chinese government has acted aggressively to limit increases in iron ore prices – increases that are largely the result of the rapid expansion of the Chinese steel industry itself.

**Subsidization of Iron Ore Investments**

The Chinese government’s support of the steel industry with respect to raw material supplies is not limited to direct and indirect controls over prices. The explicit policy of the Chinese government is to assist the Chinese steel producers in securing sources of overseas supply through investments. To ensure access to iron ore supplies, the Chinese government and Chinese companies have negotiated investments in a number of iron ore projects worldwide. Most of these projects involve the development of mines, although some concern existing facilities, with much of the investment subsidized by the government. Indeed, the Chinese government recently granted Jiangsu Shagang Steel Group 1.3 billion RMB in subsidies for its iron mine project in Australia. Additional projects, with their estimated capacities, include:

- Extension Hill, Western Australia, Australia (5 million MT/year)
- Labrador, Canada (10-12 million MT/year)
- Camarines Norte, Philippines (unstated)
- Musan, North Korea (10 million MT/year)
- Koolan Island, Western Australia, Australia (0.3 million MT/year)
- Lao Cai, Vietnam (1.5-3 million MT/year)
- Pilbara, Western Australia, Australia (800 million MT total reserves)
- Capitan, New Mexico, USA (unstated)
- Minnesota, USA (unstated)
- Koolanooka, Western Australia, Australia (5 million MT/year)

---

138 Steel Policy, art. 30.
• Chita, Russia (10 million MT/year)
• Wheelarra, Western Australia, Australia (12 million MT/year)
• Pilbara, Western Australia, Australia (5-10 million MT/year)

Taken together, these investments could give Chinese companies, and their government owners, direct control over more than 62 million tons per year of iron ore production. This would represent control of nearly nine percent of world trade in iron ore, which totaled 715 million tons in 2005. By way of comparison, the United States produced 55 million tons of iron ore in 2005 and imported 13.0 million tons.140

In addition, the Chinese government has begun discussions with the government of Orissa state in India regarding the development of iron mines in Orissa, although no definite projects have been undertaken. India is a major supplier of iron ore to China. Similarly, China Minmetals, the state-owned metals trading company, has begun discussions on a joint venture in Brazil with Brazilian ore producer CVRD. Four Chinese steel producers have proposed a joint venture with BHP Billiton for the mining of iron ore in Australia.

China’s long-term strategy is to establish significant control over its foreign sources of iron ore. Chinese companies are preparing to invest up to $8 billion in mines in Australia alone – much of this capital presumably from state-owned banks on preferential, non-commercial terms.141 Half of these investments are expected to be in iron mines. The Chinese metals industry currently has “some kind of involvement” with suppliers providing 25 percent of current iron ore imports, and intends to raise that percentage to 50 percent.

Chinese companies have also sought to tie up iron ore supply by concluding long-term contracts with iron ore suppliers. The world iron ore market is dominated by three companies – BHP Billiton (Australia), CVRD (Brazil), and Rio Tinto (Great Britain, but with mining operations throughout the world) – which collectively control over 70

141 As noted previously, the Chinese government recently granted Jiangsu Sha Steel Group 1.3 billion RMB in subsidies for its iron mine project in Australia. China Jiangsu Offering Over 6 M RMB of Subsidies to Overseas Investors, Financial Times, Feb. 15, 2006.
percent of world seaborne iron ore trade. These producers periodically negotiate with the major iron ore consumers to set prices for the next year. Chinese customers have been pressing CVRD in particular, however, to agree to long-term contracts. As the largest buyers of iron ore, the Chinese users have significant negotiating leverage. The Chinese ore buyers do not have to act alone; Chinese government officials have noted that “market forces ought to dictate prices of iron ore, used in the making of steel, but the Chinese Government can’t help but ‘take an interest’ in how it is priced.”

In addition to negotiating with the three largest suppliers, Chinese consumers have also concluded long-term contracts with other, smaller suppliers around the world.

- BHP Billiton has agreed to sell to a consortium of four Chinese steel producers 12 million MT of iron ore per year for 10 years.

- Portman Ltd. of Australia is sold out through 2006 because of orders from China.

- Chinese companies are seeking to buy the entire output of Murchison Metals Ltd. of Australia.

- Hebei Wenfeng Iron and Steel has signed a contract with Fortescue Metals of Australia to purchase 2 million MT of iron ore per year over a 20 year period.

This strategy of using investments and long-term contracts to ensure a steady supply of iron ore would not be possible without the continuing support of the Chinese government. Indeed, the efforts of the Chinese steel industry to secure long-term sources of supply simply represent one facet of China’s overall drive to secure the raw materials its economy needs, but which the country lacks.

**Government Restrictions on Exports of Raw Materials**

The Chinese government also indirectly keeps the prices of certain key raw materials for steel production low by placing restrictions on the exportation of those materials. The best-known case involves coke, which is an essential input into making steel using the traditional blast furnace. In 2004 and 2005, China imposed a quota on exports of coke of 14.3 million metric tons. By contrast, China’s coke production in 2004
was 208 million metric tons. This caused the price for coke exported from China to rise to artificially high levels\textsuperscript{142} and had a “significant, adverse effect on U.S. integrated steel producers and their customers.”\textsuperscript{143}

The export restrictions on coke provide a benefit to the Chinese steel industry in two distinct ways. First, as a matter of basic economics, increasing the supply of an input without increasing demand will cause the price of the input to drop. By keeping the domestic supply of coke artificially high, the Chinese government keeps its domestic price artificially low. At the same time, the export restrictions make Chinese coke more expensive for foreign steel producers, reducing their competitiveness vis-à-vis the Chinese industry. In late June 2005, for example, Chinese steel producers were paying only $139 per metric ton for coke, while foreign steel producers were paying $220 per metric ton for the same coke.\textsuperscript{144} In this way, the Chinese government’s control over coke exports provides the Chinese industry with a double advantage.

The Chinese government has made it clear that it intends to continue to restrict exports of raw materials where this will benefit the steel industry. Article 30 of the Steel Policy states specifically that “{t}he export of such preliminarily processed products as coke, iron alloy, pig iron, waste steel and steel base (ingot) with high energy-consumption and serious pollution shall be restricted … .”\textsuperscript{145} Despite complaints from its trading partners, China will continue to impose restrictions on the export of key steel-making raw materials to keep domestic prices low.

**Government Controls Over Energy Prices**

The Chinese government also controls energy prices. The National Development and Reform Council sets prices for both natural gas and electricity. In the absence of a market, it is impossible to know what prices for electricity, natural gas, and

\textsuperscript{142} World Trade Organization, *China’s Transitional Review Mechanism: Communication of the United States*, No. G/MA/W/71, at 3 (Sept. 6, 2005).

\textsuperscript{143} United States Trade Representative, *2004 Report to Congress on China’s WTO Compliance* 33 (2004).

\textsuperscript{144} World Steel Dynamics, *Steel Thermometer #24*, at 15 (June 30, 2005).

\textsuperscript{145} Steel Policy, art. 30.
other forms of energy in China would be. However, “China’s pricing structure for energy resources and utilities has been criticized for causing artificially-low prices ….”

The Chinese steel industry benefits from low prices for both electricity and natural gas, if indeed Chinese steel producers pay for utilities at all. There have been reports that, for electricity in particular, local authorities, which control local utilities, may not charge favored enterprises for electricity, or charge them reduced rates. Because energy accounts for a substantial portion of the cost of producing steel, this represents a sizable benefit to Chinese steel producers.

**Currency Manipulation**

It is impossible to overstate the benefit the Chinese government’s manipulation of the value of the RMB provides to Chinese steel producers. Although the U.S. government has thus far declined to make a formal finding of manipulation, there can be no doubt that China actively manages the value of the RMB to benefit Chinese exporters, including the steel industry. Between February 2002 and March 2006, the U.S. dollar fell in value by an average of 15 percent against all currencies. Over that period, the dollar declined by an average of 24 percent against the euro and other industrialized country currencies, but by only about 1.6 percent against the Chinese RMB. The following chart shows the how other currencies have moved up and down vis-à-vis the dollar, while the value of the Chinese RMB has remained remarkably steady. This startling difference reflects the impact of currency manipulation by China.

---

146 China to Raise Retail Electricity Prices, Forbes, Mar. 2, 2006.
China has made vague promises to allow the RMB to float across a wider range. On July 21, 2005, China raised the peg for the yuan from 8.28 to 8.11. This represented only a 2 percent revaluation, which was too small to have a measurable effect on trade. Although China has announced plans to value the RMB against a basket of currencies, the RMB still tracks the dollar quite closely. In March 2006, the RMB was trading at a rate of 8.04RMB/dollar. The preceding chart shows how the Chinese government has manipulated the value of the RMB to minimize its fluctuation vis-à-vis the U.S. dollar. By comparison, the currencies of other major trading partners of the United States have fluctuated significantly.

To keep the RMB’s value down, the Chinese government must make enormous purchases of U.S. dollars, usually in the form of U.S. government bonds. The Chinese government’s purchases of U.S. dollars and other securities are currently averaging about $200 billion per year. These purchases amount to fully 9 percent of China’s GDP. Chinese government purchases of dollars and other securities create an effective 27
percent subsidy on China’s exports.\textsuperscript{148} This subsidy gives Chinese exports of steel a huge advantage in world markets. At the same time, an undervalued RMB makes imports, including steel imports, more expensive. In this way, China’s manipulation of its currency subsidizes the Chinese steel industry in two different but complementary ways.

INDIRECT GOVERNMENT SUBSIDIES TO THE STEEL INDUSTRY

In addition to direct subsidies, the Chinese government has implemented a number of policies and programs that provide its steel industry with more indirect but nonetheless concrete benefits. These include barriers to imports and foreign investment.

Import Barriers

China has traditionally restricted imports through a variety of means, including high tariffs and taxes, quotas and other non-tariff measures, and restrictions on trading rights. While China has made some progress in removing restrictions in these areas, according to USTR, “bureaucratic inertia and a desire to protect sensitive industries” has prevented substantial progress.

China’s recently released Steel Policy mandates practices which discriminate against foreign equipment and technology imports by encouraging the use of domestic products when competing domestic suppliers exist. Article 16 of the policy provides for government support in the form of “tax refunds, discounted interest rates, funds for research and other policy support for major iron and steel projects utilizing newly developed domestic equipment.” Article 18 sets forth the government’s policy on the “Import of Technology and Equipment” and states:

Enterprises are encouraged to use domestic equipment and technology and reduce imports. For equipment and technology that must be imported due to the lack of domestic ability to produce such or due to insufficient domestic supply, such equipment and technology must be modern and practical.

China also restricts imports of raw material and other steel inputs to control prices. For example, as discussed above, China has recently blocked iron ore imports above a price cap to restrict the spot price of iron ore. Moreover, in May 2005, the Chinese government began imposing new import license procedures for iron ore.

---

150 Id.
China reportedly restricted licenses to 48 traders and 70 steel producers and failed to make public a list of the qualified enterprises or the qualifying criteria used – in violation of China’s WTO obligations.152

Not surprisingly, in its most recent annual report on foreign trade barriers, USTR concluded that there are substantial barriers to trade in China that have not been dismantled.153 Specifically, USTR found that:

China has also increasingly resorted to industrial policies that limit market access by non-Chinese origin goods or rely on substantial government resources to support increased exports. The objective of these policies seems to be to support the development of Chinese industries by effectively mandating local content of products that are higher up the economic value chain than the industries that make up China’s current labor-intensive base, or simply to protect less-competitive domestic industries.154

These policies are likely in contravention of China’s WTO accession agreement in which China committed not condition the right of investment or importation on whether domestic suppliers exist.155

The report further found that import barriers, opaque and inconsistently applied legal provisions, and limitations on foreign direct investment combine to make it difficult for foreign firms to operate in China.156 Finally, USTR concluded that the central government continues to implement industrial policies and protect noncompetitive or emerging sectors of the economy from foreign competition.157

Barriers to Foreign Investment in the Steel Industry

The Chinese Government strictly regulates investment by foreign firms within China and prohibits foreign companies from owning majority stakes in most Chinese en-

---

152 United States Trade Representative, 2005 Report to Congress on China’s WTO Compliance, at 25 (Dec. 11, 2005).
153 See Mar. 2006 NTE at 93
154 Id.
155 Id. at 98.
156 Id. at 94.
157 Id.
terprises. Article 23 of China’s Steel Policy explicitly forbids foreign companies from owning a controlling stake in Chinese steel producers, stating: “[f]or any foreign investment in the iron and steel industry of China, foreign investors are not allowed to have a controlling share.” Foreign investment that is permitted is channeled toward areas that support national development objectives; foreign investment not in line with these development objectives is restricted or prohibited.

**Restrictions on Foreign Investment in the Steel Industry**

China’s Steel Policy restricts foreign investment in a number of additional ways by mandating certain requirements as conditions for investing, with added restrictions placed on foreign investors. Article 23 of the policy includes investment requirements for certain production levels in the previous year, self-financing of 40 percent or above, modern technology and management, developed supply and distribution networks, transportation, and water and power resources. These requirements appear to apply only to domestic companies seeking to operate in cross-regional domestic steel operations, while foreign companies must meet these requirements for any investment in China. Moreover, Chinese companies only need to meet a 5 million ton previous year quantity threshold for investments in common steel and a .5 million ton threshold for investments in specialty steel. The corresponding thresholds for foreign companies are 10 million tons and 1 million tons. Additionally, Article 23 prohibits foreign companies from investing in new business sites and limits participation to reform or relocation of existing enterprises.

China’s Steel Policy also requires that foreign investors possess proprietary technology or intellectual property in the processing of steel. Given that foreign investors are not allowed to have a controlling stake in Chinese steel companies, this amounts to a *de facto* technology transfer requirement. As noted above, the policy also appears to discriminate against foreign equipment and technology imports by encourag-

---

158 Steel Policy, art. 23. In addition, Luo Bingsheng, Secretary General of the China Iron and Steel Association recently stated that “Foreigners taking a controlling stake in our major steel mills is against our iron and steel development policy. We have a batch of competitive steel mills, which can play an important role in the restructuring of the industry.” China to Shut Small Steel Mills, Urge Mergers, Reuters, Mar. 5, 2006.

159 See Mar. 2006 NTE at 150.
ing the use of domestic equipment and by providing for a number of government financial supports for steel projects utilizing newly developed domestic equipment.

**Chinese Tax Policies as a Barrier to Foreign Investment**

China’s tax policies also serve as barriers to foreign investment. China’s Value Added Tax (VAT) – the country’s single most important revenue source which ranges from 13 to 17 percent – continues to be applied in a manner that provides an unfair benefit to certain Chinese industries. According to USTR, “importers from a wide range of sectors report [that they are] subject to application of a VAT that their domestic competitors [in China] often fail to pay.”\(^{160}\) Indeed, numerous foreign manufacturers have cited the arbitrary application of the VAT and VAT rebates as an indirect subsidy aimed at limiting import competition from U.S. and other foreign products and giving price-advantage to Chinese products.\(^{161}\) As recently as March 2006, the China Iron and Steel Association (CISA) reports that the government is considering exempting the VAT for the steel product tolling business to discourage imports.\(^{162}\) According to CISA, the exemption would be designed to assist domestic steelmakers, who have seen a decline in profits during the past several months.\(^{163}\)

In addition, China’s consumption tax system is an area of concern among exporters to China and may constitute an import substitution subsidy. Because China uses a different tax base to compute consumption taxes for domestic and imported products, the tax burden imposed on a wide range of imported goods is higher than for competing domestic products.\(^{164}\) In fact, importers may pay twice as much as they would if the tax were assessed at the same rate as for Chinese products, putting U.S. imports at a severe disadvantage vis-à-vis their Chinese competition.\(^{165}\)

\(^{160}\) *Id.* at 107.

\(^{161}\) Letter to Gloria Blue, *supra* at 14.

\(^{162}\) *China Considers Exempting Value-Added Tax on Steel Product Tolling Business*, Interfax, Mar. 29, 2006.

\(^{163}\) *Id.*

\(^{164}\) *Mar. 2006 NTE* at 107.

\(^{165}\) See United States Council for International Business, *Statement re: Submission to the United States Trade Representative (USTR) on China’s Compliance With its WTO Commitments* 11 (Sept. 6, 2005).
**Other Barriers**

Finally, USTR cites additional barriers to investment that plague China, including a “lack of transparency, inconsistently enforced laws and regulations, weak IPR protection, corruption and an unreliable legal system incapable of protecting the sanctity of contracts.”

---

166 Mar. 2006 NTE at 149.
STRUCTURAL SUBSIDIES TO THE STEEL INDUSTRY

In addition to direct and indirect assistance, the Chinese government also provides support to the Chinese steel industry through broader policies and practices. Prominent among these are the Chinese government’s failure to enforce environmental and labor laws. In each case, China has relatively tough laws on the books, but declines to enforce them.

Weak Environmental Regulation

On paper, China’s environmental laws are relatively stringent. In practice, the laws are often laxly enforced. Environmental enforcement in China is primarily the responsibility of local governments – the same local governments that often own controlling shares in local steel producers and that look to those producers to provide employment and tax revenues. Given this, it is no surprise that Chinese government organs have repeatedly allowed the steel industry to continue to pollute.167

In an attempt to reassert central control over environmental enforcement, the State Environmental Protection Administration (SEPA) recently announced that it was launching a concentrated investigation of industries that are major polluters, including the steel industry.168 Among the firms named specifically as a subject of investigation was Xingtai Iron and Steel Corp.169 SEPA also stated that it was investigating Nanjing Steel, which launched an expansion project without performing the required environmental impact assessment.170 Meanwhile, the official Xinhua News Agency released a detailed report in 2005 regarding a steel mill built on illegally obtained land in Henan Province that violated environmental standards by discharging untreated wastes directly into a nearby reservoir – a reservoir designed to provide water to Beijing and Tianjin.171

168 Id.
169 Id.
170 Id.
Despite the publicity given this initiative, the widespread expectation is that the Chinese steel industry will continue to pollute the environment with little concern for environmental regulations. The scale of pollution is staggering; the Shougang mills in Beijing municipality alone discharge approximately 18,000 tons of particulates into the air every year.\footnote{David Eimer, \textit{Beijingers Will Need Their Masks; There Are No More “Clean Air” Days}, Financial Times, Oct. 19, 2005.} Observers from the American Iron and Steel Institute and the Steel Manufacturers Association visiting China in 2005 noted steel mills that apparently lacked any standard pollution control devices, such as baghouses, scrubbers, and precipitators. This was not limited to the smallest producers; one of the mills visited belonged to Jiangsu Shagang, one of the largest producers in China. A major problem is the continued use of small (40 ton or less) basic oxygen furnaces that are typically antiquated and lack any environmental control features.

The concentration of pollution in China closely tracks the location of the steel industry. As discussed above, China’s steel industry is concentrated in the eastern part of the country, and especially in Hebei, Jiangsu, Liaoning, and Shandong provinces. As the following chart shows, this is also where concentrations of a major pollutant, nitrogen dioxide, are located. Moreover, these concentrations doubtless reflect the presence of other major pollutants, such as sulfur dioxide and particulates, as well.

**CHART 3**

**EMISSIONS OF NITROUS OXIDES IN CHINA**
The lack of effective environmental regulation for the Chinese steel industry is having profound effects on the world’s environment. By some measures, China is responsible for 25 percent of worldwide emissions of particulates. The Chinese steel industry is a major contributor. China has also emerged as the world’s second greatest emitter of greenhouse gases. The expansion of the steel industry, and its demand for electricity produced in large part by heavily polluting coal-fired generating plants, is a major cause.

The Chinese steel industry is less energy efficient than the steel industries in the United States, the European Union, and other developed countries. As discussed above, it also generally does an inadequate job of controlling emissions of pollutants. By its policies that fuel the artificial expansion of the steel industry, the Chinese government is forcing the transfer of steel production to high-polluting facilities in China from relatively low-polluting facilities in the rest of the world. China benefits economically from the increased production, but the whole world – including China – loses because of the increased pollution and greenhouse gas emissions for which the Chinese steel industry is responsible.

**Labor Laws and Ensure Worker Safety**

Workers in China are regularly denied basic labor rights and remain largely unprotected by the weak enforcement of China’s existing labor law and policies. China’s labor law prohibits workers from organizing independent unions and does not provide for the right to strike. There is only one trade union in China, the All China Federation of Trade Unions, which is essentially an extension of the Communist Party in workplaces. Many workers lack minimal health and safety protections and adequate wages.

Without the right to organize independently, Chinese steelworkers lack effective ways to resolve labor issues in the workplace. Moreover, workers who organize labor

---


protests and demonstrations may face severe government repression.\textsuperscript{175} For example, a crackdown carried out by local police in October 2005 against protesting workers from the Chongqing Steel Plant resulted in two deaths, a 70 year old woman and a 50 year old woman, and dozens more injured. The police crackdown was the result of a series of demonstrations by several thousand steelworkers who were laid off from the plant without compensation in August 2005, following the company’s bankruptcy. Several of the protest leaders were detained.\textsuperscript{176} In 2003, independent metalworkers’ representatives at the Ferro Alloy Factory in Liaoyang were arrested for their part in a peaceful workers’ protest over unpaid wages and benefits and then charged with “illegal assembly” and “subversion of state power.” Two of the representatives, including Yao Fuxin, were sentenced to prison terms of up to seven years.\textsuperscript{177} Others labor leaders have been detained or sent to forced labor camps without trial.

In its most recent annual human rights report, the State Department confirmed China’s poor labor record, concluding that China restricts “labor rights, including freedom of association, the right to organize and bargain collectively, and worker health and safety.”\textsuperscript{178} It noted that “[p]rotests by those seeking to redress grievances increased significantly” in 2005 and were often suppressed violently by Chinese security forces.\textsuperscript{179} It also found that although Chinese law permits collective bargaining, this right is largely illusory.\textsuperscript{180}

In addition, the State Department made the following findings:

- China has no comprehensive policy to combat child labor.

\textsuperscript{175} See Id.


\textsuperscript{179} Id.

\textsuperscript{180} Id. at 30.
• China has no national minimum wage (although individual provinces and cities often have local minimum wages).

• Wage arrearages to employees are common.

• Rules regulating the number of hours worked per week and overtime were regularly violated in 2005. Specifically, “in the manufacturing sector, compulsory overtime reportedly was common, often without overtime pay” and “factories routinely falsified overtime and payroll records.”

• The “poor enforcement of occupational health and safety laws and regulations continued to put workers’ lives at risk.” According to official Chinese statistics, a total of 5,986 workers died in coal mines in 2005. In addition, there were reports of serious accidents in which miners were killed when mine managers forced them to continue working under unsafe conditions.

• Many factories that used harmful materials or processes not only failed to protect their workers against the ill effects of such materials or processes, but failed to inform them of the hazards and denied their claims for compensation when they fell ill or were otherwise injured.

The State Department is not alone in finding gross inadequacies in China’s labor record. Freedom House, a prominent human rights and pro-democracy organization, reports that:

Freedom of assembly and association is severely restricted. … Independent trade unions are illegal, and enforcement of labor laws is poor. All unions must belong to the state-controlled All China Federation of Trade Unions, and several independent labor activists have been jailed for their advocacy efforts. Collective bargaining is legal in all industries, but it does not occur in practice.

\[181\] \textit{Id.} at 31.

\[182\] \textit{Id.}

\[183\] \textit{Id.}

Other human rights organizations have documented labor abuses in China, including being forced to work overtime without pay; denying women the right to paid maternity leave; denying workers pay for sick leave and denying their legal right to national holidays; and illegally denying workers health insurance and then terminating those that are injured on the job.\textsuperscript{185}

CONCLUSION

Under true market conditions, China would undoubtedly have a large and diverse steel industry. It would not have a steel industry that has grown to account for a staggering 31 percent of total world steel production. The Chinese steel industry in its current form is the creation of the Chinese government. It has benefited from massive direct and indirect subsidies, many of which violate the WTO Subsidies Agreement, China’s obligations under its WTO accession agreement, or both. These subsidies are likely to continue unabated as the Chinese government recently adopted an official policy that requires it to continue to provide the steel industry with massive subsidies.

The consequences of these actions have been profound. The growth of the Chinese steel industry has been at the expense of its international competitors. The Chinese steel industry’s expansion is simply one component of an overall strategy that has resulted in the displacement of production in dozens of steel consuming industries from the United States to China, at the cost of hundreds of thousands, if not millions, of American jobs. Because the Chinese steel industry emits more pollutants and greenhouse gases than the steel industries in the United States and other countries, subsidization of the Chinese steel industry has had a negative impact on the environment. The economic stability and security of the United States, and the health of the global environment, demand that the Chinese government end its policy of subsidization of the Chinese steel industry.