Chinese Steel Market and Export

Capacity Reduction and Price Increase

Presentation to:
SteelOrbis Spring 2017 Conference
76th IREPAS Meeting
Budapest, March 27, 2017

Simon Yu
Jiangsu Yonggang Group Co., Ltd.
I. **Update to the Chinese Steel Market**

II. China's Steel Export

III. Outlook for Chinese Steel Industry

IV. Brief Introduction of Yonggang Group
1. Crude Steel Production

- China's crude steel production in 2016 reached 808 million tons, returned to a growth of 1.24% yoy after 2015 (decreased by 2.3%), accounted for 49.6% of world crude steel production.

- China's crude steel production in Jan-Feb 2017 reached 128.77 million tons, up by 5.8% yoy.
2. Apparent Crude Steel Consumption

China’s apparent crude steel consumption reached 709 million tons in 2016, registered a growth of 2.08% yoy, returned to the positive growth after 2013. (2014 as -4% and 2015 as -5.5%)
In 2015, steel price in Chinese market declined continuously owing to various factors such as excess capacity and reduced demand.

In 2016, China’s steel price began to rebound, mainly in two periods, March to April, and Oct. to Dec. And it was further up in early 2017.

3. Steel Price
Yonggang's Rebar price increased by 68.5% in 2016 (from RMB1840/mt in early Jan. into RMB3100/mt in end Dec.).

Yonggang's Rebar price further increased by 17.7% in the past time of 2017 (into RMB3650/mt on 10th March).
5. Iron Ore

- China’s domestic iron ore production in 2016 reached 1.281 billion tons, down by 3% yoy;
- China imported 1.024 billion tons iron ore in 2016, up by 7.5% yoy, which set record high. The average import iron ore price was $56.42/dmt, down by 0.5% yoy.
- In 2016, the Platts Iron Ore Index price of 62% Fe CFR North China increased by 86.5% (from $42.7/dmt early Jan. into $79.65/dmt end Dec.). It was further up by 8.5% into $86.4/dmt till 10th March 2017.
6. Coking Coal

- In 2016, China's coal **production** stayed at 3.36 billion tons, **down by 9.4%** yoy. China **reduced** more than **290 million tons** of inefficient coal mining capacity.
- In 2016, China imported **59 million tons** coking coal, up by **23.4%** yoy.
- Coking coal **price** at Tangshan area **increased by 141%** in 2016 (from RMB635/mt in early Jan. into RMB1530/mt in end Dec.).
7. Met Coke

- In 2016, China's Met Coke production stayed at 447.63 million tons, up by 0.3% yoy compared with a 0.74% growth of pig iron.
- Chinese met coke price in Tangshan area increased by 183% in 2016 (from RMB690/mt early Jan. into RMB1950/mt end Dec.).
- During Jan-Feb 2017, the met coke price showed a decreasing trend but still stayed at high level.
I. Update to the Chinese Steel Market
II. China's Steel Export
III. Outlook for Chinese Steel Industry
IV. Brief Introduction of Yonggang Group
After consecutive six years' growth, China's steel export turned to decline in 2016. China exported 108.49 million tons finished steel products in 2016, with a decrease of 3.96 million tons, down by 3.48% yoy.

China's steel import registered 13.21 million tons in 2016, with an increase of 0.42 million tons, up by 3.4% yoy.

During Jan-Feb 2017, China's accumulative steel export registered 13.17 million tons, with a sharp decrease of 4.68 million tons, down by 25.7% yoy.

From July 2016, the China's steel export showed a generally continuous decreasing trend.
2. Steel Export to Europe

✓ In 2016, China’s finished steel products export to EU decreased by 24.53%, while export to the whole Europe decreased by 20.1%.

<table>
<thead>
<tr>
<th>No</th>
<th>Countries and Regions</th>
<th>Cumulative 2016</th>
<th>Cumulative 2015</th>
<th>YOY %</th>
<th>Porportion %</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>World Total</td>
<td>108491.54</td>
<td>112399.26</td>
<td>-3.48</td>
<td></td>
</tr>
<tr>
<td>2</td>
<td>ASEAN</td>
<td>38937.51</td>
<td>34575.40</td>
<td>12.62</td>
<td>35.9%</td>
</tr>
<tr>
<td>3</td>
<td>Middle East</td>
<td>15818.92</td>
<td>17069.11</td>
<td>-7.32</td>
<td>14.6%</td>
</tr>
<tr>
<td>4</td>
<td>Korea</td>
<td>14336.51</td>
<td>13492.29</td>
<td>6.26</td>
<td>13.2%</td>
</tr>
<tr>
<td>5</td>
<td>Africa</td>
<td>7996.41</td>
<td>8700.06</td>
<td>-8.09</td>
<td>7.4%</td>
</tr>
<tr>
<td>6</td>
<td>EU</td>
<td>6474.87</td>
<td>8579.74</td>
<td>-24.53</td>
<td>6.0%</td>
</tr>
<tr>
<td>7</td>
<td>South America</td>
<td>4718.32</td>
<td>5765.53</td>
<td>-18.16</td>
<td>4.3%</td>
</tr>
<tr>
<td>8</td>
<td>Central America</td>
<td>2368.34</td>
<td>2554.58</td>
<td>-7.29</td>
<td>2.2%</td>
</tr>
<tr>
<td>9</td>
<td>Other European Country</td>
<td>1181.62</td>
<td>1003.22</td>
<td>17.78</td>
<td>1.1%</td>
</tr>
<tr>
<td>10</td>
<td>USA</td>
<td>1169.38</td>
<td>2424.29</td>
<td>-51.76</td>
<td>1.1%</td>
</tr>
</tbody>
</table>
3. Steel Export to Europe

✔ In 2016, China’s long steel products and “square bars” total export quantity decreased by 4.02% yoy, while the export to the EU and the whole Europe decreased by 44.4% and 44% respectively.

<table>
<thead>
<tr>
<th>No</th>
<th>Countries and Regions</th>
<th>Cumulative 2016</th>
<th>Cumulative 2015</th>
<th>YOY %</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>World Total</td>
<td>29457.7</td>
<td>30691.4</td>
<td>-4.02</td>
</tr>
<tr>
<td>2</td>
<td>ASEAN</td>
<td>14193.4</td>
<td>12929.2</td>
<td>9.78</td>
</tr>
<tr>
<td>3</td>
<td>Middle East</td>
<td>4482.2</td>
<td>5185.5</td>
<td>-13.56</td>
</tr>
<tr>
<td>4</td>
<td>Korea</td>
<td>3281.3</td>
<td>2834.9</td>
<td>15.75</td>
</tr>
<tr>
<td>5</td>
<td>Africa</td>
<td>2169.6</td>
<td>2518.9</td>
<td>-13.87</td>
</tr>
<tr>
<td>6</td>
<td>Central America</td>
<td>688.5</td>
<td>800.5</td>
<td>-14</td>
</tr>
<tr>
<td>7</td>
<td>EU</td>
<td>579.3</td>
<td>1041.6</td>
<td>-44.38</td>
</tr>
<tr>
<td>8</td>
<td>South America</td>
<td>527.3</td>
<td>559.2</td>
<td>-5.72</td>
</tr>
<tr>
<td>9</td>
<td>USA</td>
<td>46.3</td>
<td>57.2</td>
<td>-19.11</td>
</tr>
<tr>
<td>10</td>
<td>Other Europeen Country</td>
<td>38.6</td>
<td>61.6</td>
<td>-37.29</td>
</tr>
</tbody>
</table>
Proportion of China's steel export on total steel production reached high in 2015 and then became decrease in 2016, and it further significantly decreased in Jan-Feb 2017.
5. Analysis of Decreasing Export

- The slowdown in the global economy growth.
- The continuous aggravation of International Trade Protectionism. In 2016 China suffered 119 trade frictions. 49 trade remedy cases are against China's steel products, among which anti-dumping 32 cases, subsidy 10 cases, safeguard 7 cases.
- China’s steel price rebounded strongly from 2016, the competitiveness of export price has been weakened gradually.
I. Update to the Chinese Steel Market
II. China's Steel Export
III. **Outlook for Chinese Steel Industry**
IV. Brief Introduction of Yonggang Group
1. The Chinese Economy Remained Stable

- The Chinese economy rebounded in Q4 2016 with a **GDP growth rate of 6.8%**, up slightly by 0.1 percentage points over Q3 2016, and to be flat with the same period one year ago.

- China has set the GDP growth **target** for 2017 of around **6.5%** and try to achieve better results. This will lay a solid foundation for development of China's steel industry this year.

![Quarterly GDP yoy](image.png)
2. PPI Strongly Rebounded

- **PPI** which measures costs of goods at the factory gate, hitting an over-eight-year high of **7.8%** in Feb 2017.
- Strong PPI rebound and turnaround in Chinese heavy industry have improved corporate revenue, profit growth and debt service capacity, leaving the real economy much better placed to tolerate higher nominal rates.

![Graph showing PPI Year-on-Year Trend from 2012 to 2018](chart.png)
3. Domestic Steel Demand Forecast in 2017

In 2017, as estimated by CISA, China's automobile industry will keep growing, the growth of real estate industry may slow down a little bit, but the investment in infrastructure construction will be a bright spot. China's domestic steel demand will remain stable in 2017.

<table>
<thead>
<tr>
<th>Industry</th>
<th>2016 (MMT)</th>
<th>2017E (MMT)</th>
<th>Ratio yoy</th>
</tr>
</thead>
<tbody>
<tr>
<td>Construction</td>
<td>366</td>
<td>362</td>
<td>-1.10%</td>
</tr>
<tr>
<td>Machinery</td>
<td>125</td>
<td>124</td>
<td>-0.80%</td>
</tr>
<tr>
<td>Automobile</td>
<td>57</td>
<td>59</td>
<td>3.50%</td>
</tr>
<tr>
<td>Shipbuilding</td>
<td>11.5</td>
<td>11</td>
<td>-4.30%</td>
</tr>
<tr>
<td>Home Appliance</td>
<td>9.5</td>
<td>9.5</td>
<td>0.00%</td>
</tr>
<tr>
<td>Railway</td>
<td>4.6</td>
<td>4.8</td>
<td>4.30%</td>
</tr>
<tr>
<td>Container</td>
<td>3.5</td>
<td>3.4</td>
<td>-2.90%</td>
</tr>
<tr>
<td>Energy</td>
<td>27.5</td>
<td>27.5</td>
<td>0.00%</td>
</tr>
<tr>
<td>Total of above industries</td>
<td>604.6</td>
<td>601.1</td>
<td>-0.60%</td>
</tr>
<tr>
<td>Other industries</td>
<td>72</td>
<td>71</td>
<td>-1.40%</td>
</tr>
<tr>
<td>Steel Consumption</td>
<td>677</td>
<td>672</td>
<td>-0.70%</td>
</tr>
</tbody>
</table>
4. Progress in Reducing Excess Capacity

✓ **Targets in 5 years:**
   1. China will reduce another **100 to 150 million tons** of crude **steel** capacity in the coming 5 years starting from 2016.
   2. China will reduce **500 million tons** of **coal-mining** capacity, and will reduce another **500 million tons** production through the mergers and reorganizations of the coal enterprises in the coming 3 to 5 years starting from 2016.

✓ **Results achieved in 2016:**
   1. China has already reduced more than **65 million tons** of inefficient **steel** capacity.
   2. China has already reduced more than **290 million tons** of **coal-mining** capacity.

✓ **Target in 2017:**
   1. Reduce **50 million tons** of inefficient **steel** capacity.
   2. Phase out the production of low-quality steel made from medium frequency furnaces by scrap metal, or “ditiaogang”, before the end of June 2017.
   3. Reduce **150 million tons** of inefficient **coal-mining** capacity.
5. Chinese Steel Industry Outlook In 2017

- Efforts to reduce excess capacity will continue.
- Efficient supply level will continue to improve.
- Steel industry mergers and reorganizations will be further promoted.
  Baosteel + WISCO = BAOWU Steel Group
- Steel consumption will remain stable.
- Long products price will generally show a stable and may further up trend.
  Phasing out the production of “ditiaogang” and increased investment in infrastructure construction is propping up the price of long products.
- Steel export will show a significant decrease, especially long products.
  Steel export decrease by 3.48% in 2016.
  Decrease by 25.7% in Jan-Feb 2017.
  Expected further decrease in coming months.

www.yong-gang.com
I. Update to the Chinese Steel Market
II. China's Steel Export
III. Outlook for Chinese Steel Industry
IV. **Brief Introduction of Yonggang Group**
1. Location

Jiangsu Yonggang Group Co., Ltd.
Located at Zhangjiagang City, Jiangsu Province, China

SHANGHAI — YANGTZE RIVER — JSYG — Yangtze River

Shanghai → JSYG 100KMs
JSYG → Yangtze River 10KMs

www.yong-gang.com
2. Profile

- **Established**: In 1984
- **Capacity**: 9 million tons
  - 8 mmt from Blast Furnaces
  - 1 mmt from EAF
- **Employee**: 10,000
- **Sales**: 4.4 billion USD in 2016

www.yong-gang.com
3. Products

<table>
<thead>
<tr>
<th>Products</th>
<th>Capacity (Million Tons)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Re-bar</td>
<td>4.5</td>
</tr>
<tr>
<td>Wire Rod</td>
<td>3.5</td>
</tr>
<tr>
<td>Round Bar</td>
<td>1</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>9</strong></td>
</tr>
</tbody>
</table>
## 4. Specifications

<table>
<thead>
<tr>
<th>Products</th>
<th>Category</th>
<th>Grades</th>
<th>Main Sizes</th>
<th>Application</th>
</tr>
</thead>
<tbody>
<tr>
<td>Re-bar</td>
<td>BS</td>
<td>B500B, B500C etc.</td>
<td>6-16mm coil, 10-50mm straight</td>
<td></td>
</tr>
<tr>
<td></td>
<td>ASTM</td>
<td>G40, G60S, G60W etc.</td>
<td>3/8&quot; - 1-3/8&quot;</td>
<td></td>
</tr>
<tr>
<td></td>
<td>DIN/KOMO</td>
<td>B500B</td>
<td>10-40mm straight</td>
<td></td>
</tr>
<tr>
<td></td>
<td>MS</td>
<td>B500B</td>
<td>8-12mm coil, 10-50mm straight</td>
<td>Construction</td>
</tr>
<tr>
<td></td>
<td>KS</td>
<td>SD400, SD500, SD600</td>
<td>10-41mm</td>
<td></td>
</tr>
<tr>
<td></td>
<td>ACIS</td>
<td>500N, 500E</td>
<td>8-16mm coil, 10-36mm straight</td>
<td></td>
</tr>
<tr>
<td>Wire Rod</td>
<td>Low Carbon</td>
<td>SAE1006-1022</td>
<td>5.5-26mm</td>
<td>Mesh, Nails, Bolts, Nuts, Steel Wire etc.</td>
</tr>
<tr>
<td></td>
<td>High Carbon</td>
<td>SAE82B, SAE82B, SAE82C Mn etc.</td>
<td>5.5-13mm</td>
<td>PC wire, PC Strands, Wire Rope etc.</td>
</tr>
<tr>
<td></td>
<td>Cold Heading Quality</td>
<td>SWRCH6A-22A, 10B21/33, 15B25, SCM420, SCM435, SCM440 etc.</td>
<td>5.5-26mm</td>
<td>Various of Fastners, Bolts, Nuts etc.</td>
</tr>
<tr>
<td></td>
<td>Welding Wire</td>
<td>SWRY11, ER70S-3/6/G etc.</td>
<td>5.5/6.5mm</td>
<td>Electrodes, Welding wire</td>
</tr>
<tr>
<td></td>
<td>Prestressed Steel Bar</td>
<td>30MnSi, 30Si2Mn</td>
<td>6-14mm</td>
<td>Prestressed Steel Bars for Concrete</td>
</tr>
<tr>
<td></td>
<td>Steel Cord &amp; Bead Wire</td>
<td>YLX70A, YLX80A, C72DA, C82DA</td>
<td>5.5mm</td>
<td>Steel Cord &amp; Bead Wire for Tires</td>
</tr>
<tr>
<td>Round Bar</td>
<td>Quality Carbon Structural Steel</td>
<td>C45E, C45R, C55 etc.</td>
<td>75-350mm</td>
<td>Machining, Forging, Crankshaft, Gear, Tube etc.</td>
</tr>
<tr>
<td></td>
<td>Alloy Structural Steel</td>
<td>20CrMo, 42CrMo, 42CrMoS4 etc.</td>
<td>75-350mm</td>
<td>Machining, Forging, Crankshaft, Gear, Tube etc.</td>
</tr>
<tr>
<td></td>
<td>Grinding Ball Steel</td>
<td>S-704, S-901, R25 etc.</td>
<td>75-130mm</td>
<td>Grinding Ball</td>
</tr>
<tr>
<td></td>
<td>Bearing Steel</td>
<td>SAE52100</td>
<td>75-120mm</td>
<td>Bearing</td>
</tr>
</tbody>
</table>
5. Certificates

- **ISO14001**
- **TS16949**
- **API**
- **CARES**
- **DCL**
- **KIWA**

www.yong-gang.com
6. Applications

Marina Bay Sands Hotel
Singapore

Cambodia Tatai Hydroelectric
Power Station

Shanghai Pudong
International Airport

Steel Cord & Bead Wire
for Tires

Various Fasteners
www.yong-gang.com

Shafts and Gears
Yonggang has its own **Yantze River Port** with 10.8m designed fresh water draft and available for berthing of capesize vessels. The port is about 10kms away from the mill and provides strong logistic advantages for raw material import and steel products export.

**Indoor Warehouse**  
**Loading of Wire Rods for Export**
Yonggang started to export from 2006, and exported 2.6 million tons of steel products in 2016, was always one of the main long steel products exporters in China. Yonggang’s products have been exported to 101 countries and areas worldwide.
9. Export to Europe

- Wire Rod: mainly to Spain, Italy, Portugal etc.
- Re-bar: mainly to UK, Germany, the Netherlands etc.
- Round Bar: mainly to UK, Spain, Italy, Portugal etc.

Export Quantity to Europe (tons)
Thanks for your attention!

Jiangsu Yonggang Group Co., Ltd.
Simon Yu
Vice President
Tel: +86-512-58619872
Fax: +86-512-58612337
Email: simon@yong-gang.com
Website: www.yong-gang.com