World Steel Industry Development and Market Prospects

13th International Market and Trade Conference
Global Steel Industry in the post-Crisis Period
Global economic recovery continues to disappoint

- The global economy grows on a single engine
  - With strong fundamentals, the US remains the bright spot
  - The Eurozone recovery is firming, but still lacking strength
  - China decelerating, other emerging economies struggling
  - Geopolitical tensions continue to undermine growth in some regions

Sources: IMF, Haver Analytics
Uneven recovery in steel demand

- Post-crisis recovery led by the emerging economies

**Steel Demand Recovery**

Apparent Steel Use, finished steel (SRO April 2015)

<table>
<thead>
<tr>
<th>Region</th>
<th>2014 as % of 2007</th>
</tr>
</thead>
<tbody>
<tr>
<td>World</td>
<td>125.9</td>
</tr>
<tr>
<td>United States</td>
<td>98.7</td>
</tr>
<tr>
<td>European Union (28)</td>
<td>73.2</td>
</tr>
<tr>
<td>Germany</td>
<td>91.7</td>
</tr>
<tr>
<td>Japan</td>
<td>83.2</td>
</tr>
<tr>
<td>China</td>
<td>169.9</td>
</tr>
<tr>
<td>India</td>
<td>146.3</td>
</tr>
<tr>
<td>Brazil</td>
<td>111.7</td>
</tr>
<tr>
<td>ASEAN (5)</td>
<td>152.1</td>
</tr>
<tr>
<td>MENA</td>
<td>128.5</td>
</tr>
</tbody>
</table>
Steel demand shifts to low gear with China deceleration

Steel Demand Evolution
(Apparent Steel Use, finished steel)

China, Mt  Developing ex China, Mt  Developed, Mt  World, y-o-y % growth

China  Developing ex China  Developed

2007  2008  2009  2010  2011  2012  2013  2014

418  447  551  588  641  660  735  711
329  332  299  348  374  391  406  415
474  447  300  373  397  389  388  412

y-o-y % growth

2007  2008  2009  2010  2011  2012  2013  2014

-40  -30  -20  -10  0  10  20  30
How are other industries doing?

Sources: different, OICA, worldsteel, IAI, USGS
Overcapacity to stay

- During ‘00~’14, global crude steel capacity increased by 1300 Mt to reach 2351 Mt vs. crude steel production up by 815 MT to 1665 Mt
  - Chinese capacity increased by 990 Mt to 1140 Mt, production up by 694 Mt to 823 Mt

Global Capacity vs Demand (2000=100)

Capacity Utilization Ratio
Steel industry stuck in low performance

- Steel companies’ profitability converges at a low level due to overcapacity and high raw material prices

Sources: different, companies’ reports, Thomson Reuters
Steel Market Prospects
Factors shaping future steel market development

- Deleveraging in the developed economies
- Deceleration of investment-led growth in China
- Structural reforms in the developing and emerging economies
- Geopolitical stability and transformation of MENA countries
- Lower oil prices (at least in the medium term)

GDP Growth Forecasts, %

Source: IHS Global Insight
Impact of low oil prices

**Negative**
- Investment in the energy sector will slow
- Infrastructure projects in oil revenue dependent countries to be scaled down

**Positive**
- Lower energy cost to boost manufacturing and consumer spending
- Lower inflationary pressure provides more space for supportive monetary policy in high inflation countries and energy price reform

**Oil net exports as % of GDP in 2013**

**Fiscal breakeven oil price (USD/bbl)**

- Iran 131
- Nigeria 123
- Venezuela 118
- Russia 105
- Saudi Arabia 104
- United Arab Emirates 81

Source:
- Worldsteel calculations based on Gl nominal GDP (USD) and UN Comtrade trade (USD, HS 2709), 2013 (2011 for UAE, 2010 for Turkey), selected countries
- Fiscal breakeven oil price, USD per barrel, Deutsche Bank and IMF
Deleveraging in the developed economies

- Deleveraging in the developed economies is progressing only at a slow speed, differentiated.
- Public sector debt has increased as a result of anti-crisis measures and slow growth.
- Deflationary pressure to aggravate debt burden.

Source: Haver Analytics
Diverging growth prospects of the developing economies

- Structural reform will define growth potential
  - Brazil and Russia trapped in structural problems
  - Mexico has brighter prospects thanks to the strong reform agenda
  - ASEAN countries with reform agenda will outperform others
  - MENA outlook clouded by low oil prices and geopolitical instability
  - India getting ready for a take off with renewed reform initiatives
Unleashing potential of emerging markets

- Structural reform agenda is a prerequisite for unleashing potentials in the developing countries
- Low oil prices to facilitate reform environment

<table>
<thead>
<tr>
<th></th>
<th>GDP/capita, USD</th>
<th>Urbanization, %</th>
<th>Population,(mln)</th>
<th>Steel use per capita, kg</th>
</tr>
</thead>
<tbody>
<tr>
<td>India</td>
<td>1636</td>
<td>9489</td>
<td>33</td>
<td>40</td>
</tr>
<tr>
<td>Indonesia</td>
<td>3401</td>
<td>12312</td>
<td>54</td>
<td>63</td>
</tr>
<tr>
<td>Vietnam</td>
<td>2012</td>
<td>8096</td>
<td>34</td>
<td>43</td>
</tr>
<tr>
<td>Thailand</td>
<td>5561</td>
<td>14391</td>
<td>50</td>
<td>64</td>
</tr>
<tr>
<td>Egypt</td>
<td>3376</td>
<td>9109</td>
<td>43</td>
<td>47</td>
</tr>
</tbody>
</table>

Sources: UN, Global Insight
Conclusion

- Steel industry will face new normal of low growth and low profit
  - With China deceleration, lacking a strong growth engine
  - Unleashing other emerging economies’ potential requires time
- Capacity build ups in newly emerging economies cause concern
- Steel industry’s sustainability under great stress
  - Current profitability inadequate to meet huge R&D bill to meet the challenges of climate change
  - Inter-material competition and more efficient use of steel reduces steel market expansion potential
- Focus on value creation rather than expansion