GFSEC – Global Steel Market Overview
Paris – 28 March 2018
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Steel in the global economy
Introduction

- Two different measures of ‘output’

Value of production

- Purchases of inputs from other sectors
- Sector labour costs
- Sector capital costs & profits

Sector gross value added

Source: Oxford Economics
Introduction

- Three channels of economic impact
- Total impact = direct + indirect + induced impacts

Direct Impact
Steel industry activity across the globe

Indirect Impact
Activity in global supply chains due to EU steel industry purchases of inputs
- Metal ores
- Machine components
- Energy supplies
- Business services

Induced Impact
Suppliers to employees in the global steel sector and supply chain
- Food and beverages
- Recreation
- Household goods

Total Impact
Gross value added
Employment

Source: Oxford Economics
## Global steel industry sales in context

<table>
<thead>
<tr>
<th>Industry</th>
<th>US $ billion</th>
</tr>
</thead>
<tbody>
<tr>
<td>Iron &amp; steel</td>
<td>2,520</td>
</tr>
<tr>
<td>Textiles, leather, clothing</td>
<td>2,516</td>
</tr>
<tr>
<td>Electrical machinery</td>
<td>2,370</td>
</tr>
<tr>
<td>Motor vehicles</td>
<td>2,050</td>
</tr>
<tr>
<td>Rubber &amp; plastic products</td>
<td>2,027</td>
</tr>
<tr>
<td>Oil &amp; gas extraction</td>
<td>1,872</td>
</tr>
<tr>
<td>Pharmaceuticals</td>
<td>1,825</td>
</tr>
<tr>
<td>Basic chemicals, fertilisers</td>
<td>1,710</td>
</tr>
<tr>
<td>Electronic components</td>
<td>1,539</td>
</tr>
<tr>
<td>Paper products, printing</td>
<td>1,495</td>
</tr>
</tbody>
</table>

Source: Oxford Economics  
Note: Figures include transactions between firms in the same industry
Global steel industry value added production in context

US $ billion

- Oil & gas extraction: 875
- Rubber & plastic products: 560
- Metal mining; quarrying: 552
- Iron & steel manufacture: 498
- Paper products, printing: 456
- Electronic components: 429
- Aircraft, rail equipment, ships: 393
- Beverage manufacture: 317
- Non-ferrous metal manufacture: 298
- Textile manufacture: 293
- Wood product manufacture: 281

Source: Oxford Economics
## Estimates of employment

<table>
<thead>
<tr>
<th>US $ billion in 2017 (unless stated)</th>
<th>Gross production</th>
<th>Minus: total purchases</th>
<th>Equals: Gross value added (GVA)</th>
<th>Employment (thousands)</th>
</tr>
</thead>
<tbody>
<tr>
<td>China</td>
<td>1,190</td>
<td>979</td>
<td>210</td>
<td>2,000</td>
</tr>
<tr>
<td>Japan</td>
<td>277</td>
<td>211</td>
<td>66</td>
<td>260</td>
</tr>
<tr>
<td>India</td>
<td>172</td>
<td>131</td>
<td>42</td>
<td>1,300</td>
</tr>
<tr>
<td>United States</td>
<td>193</td>
<td>158</td>
<td>35</td>
<td>200</td>
</tr>
<tr>
<td>South Korea</td>
<td>107</td>
<td>82</td>
<td>25</td>
<td>130</td>
</tr>
<tr>
<td>Germany</td>
<td>68</td>
<td>50</td>
<td>17</td>
<td>169</td>
</tr>
<tr>
<td>Turkey</td>
<td>58</td>
<td>49</td>
<td>9</td>
<td>134</td>
</tr>
<tr>
<td>Brazil</td>
<td>56</td>
<td>48</td>
<td>8</td>
<td>114</td>
</tr>
<tr>
<td>Italy</td>
<td>38</td>
<td>32</td>
<td>6</td>
<td>90</td>
</tr>
<tr>
<td>France</td>
<td>24</td>
<td>20</td>
<td>4</td>
<td>49</td>
</tr>
<tr>
<td>Mexico</td>
<td>21</td>
<td>14</td>
<td>7</td>
<td>40</td>
</tr>
<tr>
<td>Russia</td>
<td>15</td>
<td>9</td>
<td>6</td>
<td>257</td>
</tr>
<tr>
<td>Rest of the World</td>
<td>302</td>
<td>239</td>
<td>63</td>
<td>1,338</td>
</tr>
<tr>
<td>Total World</td>
<td>2,520</td>
<td>2,023</td>
<td>498</td>
<td>6,079</td>
</tr>
</tbody>
</table>

GVA per job in context

US $ per job per year

- World steel industry: 89,200
- World manufacturing: 35,200
- World economy: 24,200

Source: Oxford Economics
Total impacts

Total GVA and jobs by channel of impact

Source: Oxford Economics
Long term steel demand outlook
Long term trend in steel use

Steel demand, 1950-2019

Source: worldsteel, SRO October 2018, steel demand crude steel equivalent
Long term steel intensity declines during economic development

Source: World Steel Association, World Bank
Steel intensity in selected regions.

Source: World Steel Association
Long term expected steel demand trends

Source: worldsteel, SRO and MTF, steel demand finished steel
Circular Economy
- Impact on lifetime of steel applications is industry specific

Average lifetime of steel applications is 36 years

*DA Domestic appliances, EE – electric equipment
Circular Economy
- Some sectors react faster than others

*DA Domestic appliances, EE – electric equipment

2019-2040

Estimated postponed steel demand, Mt

Steel weight, %

Construction
Progress in GFSEC
Proposed policy solutions agreed during November 2017 ministerial

I. Global challenge, collective response

II. Enhance market function (1) Refraining from market distorting subsidies and government distorting support measures

III. Enhance market function (2) Fostering a level playing field in the steel industry

IV. Enhance market function (3) Ensuring market based outcomes in the steel industry

V. Encouraging adjustment and thereby reducing excess capacity

VI. Ensure greater transparency as well as review and assessment of the implementation of GFSEC policy solutions
Excess capacity above demand

Global capacity - steel demand (fs)

Source: OECD, World Steel Association
### Net exports by region

<table>
<thead>
<tr>
<th>Region</th>
<th>2015</th>
<th>2016</th>
<th>2017</th>
<th>2018</th>
</tr>
</thead>
<tbody>
<tr>
<td>Extra-European Union (28)</td>
<td>-11,315</td>
<td>-20,354</td>
<td>-19,136</td>
<td>-27,749</td>
</tr>
<tr>
<td>Other Europe</td>
<td>-5,432</td>
<td>-3,983</td>
<td>-1,557</td>
<td>3,253</td>
</tr>
<tr>
<td>C.I.S.</td>
<td>40,427</td>
<td>43,103</td>
<td>36,889</td>
<td>38,903</td>
</tr>
<tr>
<td>Extra-NAFTA</td>
<td>-34,846</td>
<td>-29,086</td>
<td>-34,107</td>
<td>-32,140</td>
</tr>
<tr>
<td>Central America/Caribbean</td>
<td>-4,245</td>
<td>-4,447</td>
<td>-4,464</td>
<td>-3,815</td>
</tr>
<tr>
<td>South America</td>
<td>388</td>
<td>2,592</td>
<td>3,984</td>
<td>2,098</td>
</tr>
<tr>
<td>Africa</td>
<td>-28,305</td>
<td>-26,733</td>
<td>-19,254</td>
<td>-10,430</td>
</tr>
<tr>
<td>Middle East</td>
<td>-22,289</td>
<td>-21,231</td>
<td>-12,577</td>
<td>-5,396</td>
</tr>
<tr>
<td>China</td>
<td>98,378</td>
<td>94,485</td>
<td>60,899</td>
<td>55,130</td>
</tr>
<tr>
<td>Other Asia</td>
<td>-27,913</td>
<td>-31,530</td>
<td>-8,919</td>
<td>-601</td>
</tr>
<tr>
<td>Oceania</td>
<td>-2,250</td>
<td>-1,586</td>
<td>-1,691</td>
<td>-1,645</td>
</tr>
</tbody>
</table>

*Source: World Steel Association*
The way forward
The way forward

- After two decades of strong growth, demand for steel appears to be at the beginning of a period of slower growth.

- Some progress has been made on reducing excess capacity, largely owing to efforts by China, but the excess capacity problem still persists and demand growth alone will not solve the problem:
  - where large excess productive capacity exist, the need for further efforts to reduce capacity must be evaluated
  - where large demand growth is expected in the future, care should be taken not to work with over-optimistic assumptions

- Progress on the policy recommendations still need to be cemented (GFSEC draft report, 20 Sep 18, Box 2).
  - Progress on database of market distorting support measures need to continue.

- Steel industry supports a continuation of the forum, and request for an extension of the mandate beyond 2019.