CHINA & EAST ASIA: CONTINUING DOMINANCE OF METALS MARKETS

LISBON 25TH OCTOBER 2017

COPPER INDUSTRY DEVELOPMENTS & MARKET OUTLOOK IN EAST ASIA EX-CHINA & JAPAN

BY

SIMON HUNT

SIMON HUNT STRATEGIC SERVICES
## China Nominal GDP - % Change

<table>
<thead>
<tr>
<th>Year</th>
<th>Change</th>
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<tbody>
<tr>
<td>2010</td>
<td>18.3%</td>
</tr>
<tr>
<td>2011</td>
<td>18.6%</td>
</tr>
<tr>
<td>2012</td>
<td>10.5%</td>
</tr>
<tr>
<td>2013</td>
<td>10.1%</td>
</tr>
<tr>
<td>2014</td>
<td>8.3%</td>
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<tr>
<td>2015</td>
<td>7.1%</td>
</tr>
<tr>
<td>2016</td>
<td>7.9%</td>
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</table>
### GDP Forecasts of Nominal GDP 2010-2020

<table>
<thead>
<tr>
<th>Year</th>
<th>Forecast (%)</th>
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<tbody>
<tr>
<td>2010</td>
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<tr>
<td>2011</td>
<td>18.6%</td>
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<tr>
<td>2012</td>
<td>10.5%</td>
</tr>
<tr>
<td>2013</td>
<td>10.1%</td>
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<tr>
<td>2014</td>
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<td>2015</td>
<td>7.1%</td>
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<tr>
<td>2016</td>
<td>7.9%</td>
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<tr>
<td>2017</td>
<td>11.0%</td>
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<tr>
<td>2018</td>
<td>11.7%</td>
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<tr>
<td>2019</td>
<td>12.0%</td>
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<td>2020</td>
<td>10.0%</td>
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## China Refined Consumption by Semi Product – Kt-Cu

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<td>6,917</td>
<td>7,204</td>
<td>7,513</td>
<td>7,850</td>
<td>8,550</td>
<td>8,800</td>
<td>8,978</td>
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<tr>
<td><strong>Cu Plate, Sheet, Strip</strong></td>
<td>1023</td>
<td>973</td>
<td>1,069</td>
<td>1,200</td>
<td>1,335</td>
<td>1,440</td>
<td>1,518</td>
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<tr>
<td><strong>Cu Rods, Bars, Sections</strong></td>
<td>190</td>
<td>200</td>
<td>210</td>
<td>225</td>
<td>240</td>
<td>250</td>
<td>260</td>
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<tr>
<td><strong>Cu Tubes</strong></td>
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<td>872</td>
<td>928</td>
<td>1,190</td>
<td>1,545</td>
<td>1,682</td>
<td>1,792</td>
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<td><strong>Copper Foil</strong></td>
<td>250</td>
<td>300</td>
<td>410</td>
<td>515</td>
<td>620</td>
<td>770</td>
<td>875</td>
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<tr>
<td><strong>Sub–Total</strong></td>
<td>9,339</td>
<td>9,549</td>
<td>10,130</td>
<td>10,980</td>
<td>12,290</td>
<td>12,942</td>
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<td>320</td>
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<td>335</td>
<td>340</td>
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<tr>
<td><strong>Rods, Bars, Sections</strong></td>
<td>874</td>
<td>851</td>
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<td>900</td>
<td>950</td>
<td>990</td>
<td>1030</td>
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<td><strong>Tubes</strong></td>
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<td>290</td>
<td>305</td>
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<td>335</td>
<td>335</td>
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<td><strong>Plates, Sheet, Strip</strong></td>
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<td>1,159</td>
<td>1,223</td>
<td>1,314</td>
<td>1,385</td>
<td>1,455</td>
<td>1,517</td>
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<tr>
<td><strong>Total Alloy</strong></td>
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<td>2,609</td>
<td>2,693</td>
<td>2,844</td>
<td>2,985</td>
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<td>2,110</td>
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<td>2,450</td>
<td>2,800</td>
<td>2,900</td>
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<tr>
<td><strong>Refined Consumption</strong></td>
<td>9,670</td>
<td>10,048</td>
<td>10,643</td>
<td>11,374</td>
<td>12,475</td>
<td>13,157</td>
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<tr>
<td><strong>% Change</strong></td>
<td>3.90%</td>
<td>11.50%</td>
<td>7.50%</td>
<td>9.20%</td>
<td>5.30%</td>
<td>3.70%</td>
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</table>

Source: Industry, SHSS
“But we should not underestimate or become complacent about the complexity of the interactions of asset markets and the economy. Thus, evaluating shifts in balance sheets generally, and in asset prices particularly, must be an integral part of the development of monetary policy.”

Alan Greenspan, AEI, December 1996
Variability in GDP Growth Across Countries is at the Lowest in 50 Years

Chart of the day: Variability in GDP growth across countries is at the lowest in 50 years

We point the standard deviation of annual growth rates across a sample set of 45 major countries. Source: BofA Merrill Lynch Global Research, OECD
World Industrial Production
% Change – 2010-2020
## Old Age Dependency Ratios

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<tbody>
<tr>
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<td>48.3</td>
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<td>57.0</td>
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<td>43.7</td>
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<td>Singapore</td>
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<td>12.2</td>
<td>16.1</td>
<td>21.4</td>
<td>28.6</td>
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<td>43.7</td>
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<td>14.6</td>
<td>18.4</td>
<td>23.4</td>
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<td>11.1</td>
<td>13.1</td>
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<td>12.5</td>
<td>13.5</td>
<td>14.5</td>
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</table>

Source: IMF staff calculations and projections based on United Nations 2015 (medium-fertility scenario).

Note: The old-age dependency ratio indicates the size of the population 65 years of age and older as a share of the working-age population (15–64 years old).
Asian Export Growth – Up and Up Again

Source: Haver Analytics, Asianomics Group Ltd
## Asia Selected Country GDP Forecasts 2014-2020

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<tbody>
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<td>S Korea</td>
<td>2.8</td>
<td>2.04</td>
<td>1.9</td>
<td>2.4</td>
<td>2.8</td>
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<td>2.5</td>
</tr>
<tr>
<td>Taiwan</td>
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<td>0.7</td>
<td>1.5</td>
<td>2.0</td>
<td>2.5</td>
<td>2.8</td>
<td>2.8</td>
</tr>
<tr>
<td>India</td>
<td>7.5</td>
<td>8.0</td>
<td>7.1</td>
<td>5.8</td>
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Source: Various, SHSS
The Internet of Things
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<td>Building</td>
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<td>640</td>
<td>670</td>
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<tr>
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<td>585</td>
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<td>7.9</td>
<td>6.1</td>
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<td>3.6</td>
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THANK YOU