World Commodity Prices to mid-2017

AIECE General Meeting
Brussels, November 5, 2015
Paavo Suni, ETLA
Recent Developments
World Industrial Production and Non-Energy Raw Material Prices

- HWWI non-energy raw material prices, scale to the left
- Industrial production

2000/1 2002/1 2004/1 2006/1 2008/1 2010/1 2012/1 2014/1
Industrial Production in the US, EU27, G7 and China

- EU28
- G7
- China
- USA

% -change, yoy

2001/1 2003/1 2005/1 2007/1 2009/1 2011/1 2013/1 2015/1
Non-energy Commodity Prices and the Change in Chinese GDP

- Non-energy commodity prices
- GDP, rhs

HWWI-index, 2010=100

HWWI, NBSC, Frances&Meese, ETLA
Share of World Commodity Consumption, %

- Aluminium: 54%
- Nickel: 50%
- Copper: 48%
- Tin: 46%
- Zinc: 46%
- Steel: 45%
- Lead: 40%
- Cotton: 31%
- Soyabean oil: 31%
- Rice: 30%
- Soyabean meal: 30%
- Gold: 28%
- Corn: 23%
- Wheat: 22%
- Crude oil: 17%
- Sorghum: 11%
- Palm oil: 11%
- Sugar: 10%
- Natural gas: 6%
- Barley: 5%
Daily Crude Oil Prices, Brent, spot

Bloomberg, ETLA

OPEC (SA) decides to defend Mkt shares;

Shale producers as swing producers
Real Prices of World Raw Materials

- Energy
- Total
- Total excl. energy

HWWI, 2000=100

ELINKEINOELÄMÄN TUTKIMUSLAITOS, ETLA
THE RESEARCH INSTITUTE OF THE FINNISH ECONOMY
Table 1. Spring 2015 forecasts and realisations

<table>
<thead>
<tr>
<th></th>
<th>USD terms</th>
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Quarterly percentage changes

* HWWI index, total
Price Forecasts
World Commodity Prices in 2000-2017

HWWI index in US $, 2010 =100

- Total
- Non-energy
- Energy

00/1 02/1 04/1 06/1 08/1 10/1 12/1 14/1 16/1

0 20 40 60 80 100 120 140 160

World Commodity Prices in 2000-2017
Energy, Metals and Minerals
Oil and coal prices: different profiles

HWWI - Index
2010 =100

Steam coal  Crude oil  Total excl. Energy

00/1  02/1  04/1  06/1  08/1  10/1  12/1  14/1  16/1
World Oil Balance

Surplus, scale to the right  Demand  Supply

IEA, ETLA
Break even

Industry Cost Curve and Pricing of Crude Oil

Quantity

Supply 0

Supply 1

B/E

P₀

P₁

P_{\text{temp}}

E₀

E₁

Shale oil production

OPEC

Cumulative peak production in order of cost

Q₀ = Q₁

Quantity

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Prices of Metals and Minerals

HWWI index in US $, 2010 =100

- Total excl. energy
- Non-ferrous metals
- Ferrous raw materials (iron ore and steel scrap)
World Steel Production

OECD, Worldsteel, ETLA
China's Imports/Exports of Steel Mill Products

Jan 09 - Aug 15

Source: U.S. Department of Commerce and China Customs, accessed through Global Trade Atlas

Figure 6 – China's Imports/Exports of Steel Mill Products
Steel Scrap and Iron Ore Prices, 2000 = 100

- Iron ore
- Steel scrap

Graph showing the price trends of steel scrap and iron ore from 1990/1 to 2015/1.
A Global Cost Curve of Iron Ore

Soft Commodities
Prices of Agricultural Commodities

HWWI index in US $, 2010 =100

- Total excl. energy
- Textile fibres
- Wood products

00/1 02/1 04/1 06/1 08/1 10/1 12/1 14/1 16/1
Food Prices: Wheat and Rice

- Wheat (in US $ cents / bushel)
- Rice (in US $ / ton)
Beverages’ Prices: Coffee and Cocoa

![Graph showing the price trends of coffee and cocoa over time.](image)
Conclusions:

- World commodity prices at all-time-high in 2011
  - China’s rise, inadequate supply response
- Trend-wise decline after the peak until Oct. 15
  - Except oil, which fluctuated in 110 USD/bbl until June 14
  - Slowing growth of China, lagged supply rises
- Commodity prices to slow rise during the winter
- Strong inflation impacts (mainly from energy)
  - Strong negative contribution in moderation, turning into moderate rise after Q2 in 2016
- Risks: Growth in China, US MoPo, El Niño