What matters to China matters to the world

Do not give lessons to China: Europe and the US

The challenges:
- Growth model
- Rebalancing
- Sustainability

The sustainability (energy, resources, CO2 emissions) challenge
- Energy demand and intensity
- 12th 5 Years Plan
- External dependence
- CO2 emissions and pollution
After 30 years of sustained growth, China is about to become the largest economy in the world. China’s economic performance is impressive in terms of growth of income per capita and poverty reduction, although it is not unprecedented. What is unique is that this achievement is taking place in a country with a very large population of more than 1 billion.
China is the engine of world GDP growth

Contribution to world GDP growth

- We live in a 3 speed world
  - Healthy GDP growth rates in China and other developing countries
  - Anaemic growth in the US
  - Stagnation in Europe
- China accounted for 40% of world GDP growth in 2013
- What matters to China matters to the world

Source: Conference Board, World Bank
• **Long term: potential growth rate of China in the medium term**
  • China’s GDP per capita **remains far** from that in the US and the Eurozone.
  • The country still has considerable room to grow, given its **distance from the technological frontier**.
  • The challenge: from extensive growth to total factor productivity growth.
• **2007–13:**
  • In 2013, US GDP is 5.6% **higher** than in 2007
  • Euro area GDP is 1.5% **lower**
  • In China it is 58.5% **higher**
• **2013–2018**
  • The **IMF projects GDP growth of 7% p. year** on average until 2020.
The **US and the Eurozone** entered the crisis in a relatively weak position. The crisis deteriorated further the **public finances** as a result of **cyclical factors** (initial increase in public expenditure), **revenue loss**, need to **support the financial sector**, etc.
Do not lecture China (1): US public debts
Do not lecture China (2): Current account

IMF
WEO database

IMF
WEO database
Is investment excessive?

China GDP: Contributions to Growth
(in percentage points)

Slower GDP growth
Diminishing returns
Slower trade growth

Intensive growth

Rebalancing
Services, urbanization
Technology, innovation
Reforms

China: Capital Stock per capita, relative to US and Japan
(in percent)

Is investment excessive?
Just do it, Deng Xiao Ping

12th 5 Years Plan

- Develop 7 priority industries
  TECHNOLOGY, INNOVATION

- Develop the Western provinces
  HARMONY

- Protect the environment and improve energy efficiency
  SUSTAINABILITY

- Transitioning to a consumption driven economy, instead of export driven
  REBALANCING
Objectives of the 12th 5-year Plan

Investment dynamics → Sustainable model

Growth
Social harmony + Innovation
Environmental protection

INDUSTRIAL POLICY

New strategic industries
ITC, biotechnology, new energy sources

Domestic consumption engines
Tourism, shipping, airlines, pharmaceuticals

Re-inventors
Automotive, industrial equipment, steel

Restructurers
Real estate, Commercial banking

Social utilities
Power, rail, networks
China’s 3 energy priorities

Energy for growth and the improvement of living standards

Avoidance of excessively high external dependence

-17% carbon intensity by 2015
-16% energy intensity
15% target for non-fossil fuels
35,000 Km high speed train
12 m ha new forest

Sustainability/Polution

This is an example text.
Energy consumption per capita, koe

US: 7794
France: 4518
Japan: 4040
Portugal: 2482
China: 1138
Brazil: 1062

Energy consumption per capita is 1/7 of that in the US

Share of industry in total final consumption

World: 27
US: 18
EU: 22
Japan: 26
China: 47

Industry accounts for almost 50% of energy consumption

Carbon intensity of energy supply (Metric t. of CO2 per billion Btu)

China: 77
India: 45
US: 40
OECD Europe: 24
Japan: 11
Brazil: 10

80% of power generation is coal based
China’s external dependence is rising very fast
### Top 10 countries with technically recoverable shale oil resources

<table>
<thead>
<tr>
<th>Rank</th>
<th>Country</th>
<th>Shale oil (billion barrels)</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Russia</td>
<td>75</td>
</tr>
<tr>
<td>2</td>
<td>U.S.¹</td>
<td>58 (48)</td>
</tr>
<tr>
<td>3</td>
<td>China</td>
<td>32</td>
</tr>
<tr>
<td>4</td>
<td>Argentina</td>
<td>27</td>
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<tr>
<td>5</td>
<td>Libya</td>
<td>26</td>
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<tr>
<td>6</td>
<td>Australia</td>
<td>18</td>
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<tr>
<td>7</td>
<td>Venezuela</td>
<td>13</td>
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<tr>
<td>8</td>
<td>Mexico13</td>
<td>9</td>
</tr>
<tr>
<td>9</td>
<td>Pakistan</td>
<td>9</td>
</tr>
<tr>
<td>10</td>
<td>Canada</td>
<td>9</td>
</tr>
</tbody>
</table>

**World Total**: 345 (335)

¹ EIA estimates used for ranking order. ARI estimates in parentheses.

### Top 10 countries with technically recoverable shale gas resources

<table>
<thead>
<tr>
<th>Rank</th>
<th>Country</th>
<th>Shale gas (trillion cubic feet)</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>China</td>
<td>1,115</td>
</tr>
<tr>
<td>2</td>
<td>Argentina</td>
<td>802</td>
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<tr>
<td>3</td>
<td>Algeria</td>
<td>707</td>
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<tr>
<td>4</td>
<td>U.S.¹</td>
<td>665 (1,161)</td>
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<tr>
<td>5</td>
<td>Canada</td>
<td>573</td>
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<tr>
<td>6</td>
<td>Mexico545</td>
<td>545</td>
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<td>7</td>
<td>Australia</td>
<td>437</td>
</tr>
<tr>
<td>8</td>
<td>South Africa</td>
<td>390</td>
</tr>
<tr>
<td>9</td>
<td>Russia</td>
<td>285</td>
</tr>
<tr>
<td>10</td>
<td>Brazil</td>
<td>245</td>
</tr>
</tbody>
</table>

**World Total**: 7,299 (7,795)

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**Technology v. institutions

[Image of an old man looking thoughtfully]
Would you tell me please, which way I ought to go from here?

That depends a good deal on where you want to go, said the cat