2015-2030

Why will TECHNOLOGICAL INNOVATION matter more than before?

Elements of answer from:
• preliminary results from the European Strategy and Policy Analysis System (ESPAS)
• L’Expansion, No 790, December/January 2013, p. 36-37
• EP2025 report, January 2013
1. To capture clients, investments and Human Resources within the new connected global middle-class
A new global consumer class

Rise of the global middle class

Income inequalities between countries are decreasing

High growth rates play important role in middle income bulge

Source: ‘An analysis of global societal trends and their impact on the EU by RAND Europe, ESPAS Seminar, Brussels, 15 Nov 2013'
2. To capture productivity gains to re-boost growth
Productivity does not increase in the most sophisticated part of the global economy.
High growth in the West is not granted

LA CROISSANCE DISPARAÎT PEU À PEU

LES TREnte GLorieuses Ne sOnt QU’UN « ACCIDENT » DE L’HISTOIRE
Taux de croissance de la production par habitant, en %

EUROPE DE L’OUEST

<table>
<thead>
<tr>
<th>Period</th>
<th>Rate</th>
</tr>
</thead>
<tbody>
<tr>
<td>1700-1820</td>
<td>0.1</td>
</tr>
<tr>
<td>1820-1870</td>
<td>1</td>
</tr>
<tr>
<td>1870-1913</td>
<td>1.4</td>
</tr>
<tr>
<td>1913-1950</td>
<td>0.7</td>
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<tr>
<td>1950-1970</td>
<td>4</td>
</tr>
<tr>
<td>1970-1990</td>
<td>2.3</td>
</tr>
<tr>
<td>1990-2012</td>
<td>1.5</td>
</tr>
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</table>

AMÉRIQUE DU NORD

<table>
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<th>Rate</th>
</tr>
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<td>1820-1870</td>
<td>1.4</td>
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<tr>
<td>1870-1913</td>
<td>1.9</td>
</tr>
<tr>
<td>1913-1950</td>
<td>1.6</td>
</tr>
<tr>
<td>1950-1970</td>
<td>2.3</td>
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<tr>
<td>1970-1990</td>
<td>2.2</td>
</tr>
<tr>
<td>1990-2012</td>
<td>1.4</td>
</tr>
</tbody>
</table>

Source: Thomas Piketty
France: annual growth rate divided by five since the big catch-up
(reconstruction, urbanisation, re-industrialisation)
High growth rate in the rest is not granted after the big Global catch-up

**SUR LE LONG TERME, LA CROISSANCE MONDIALE NE DÉPASSE PAS 1 % PAR AN**

Taux de croissance annuel de la production mondiale par habitant, en %

- 0 (0-1700)
- 0,1 (1700-1820)
- 0,9 (1820-1913)
- 0,9 (1913-1950)
- 2,5 (1950-1980)
- 1,7 (1980-2012)

Source: Thomas Piketty
3. To increase labour participation
New demographic reality

Demographic dividend: A youth bulge in the developing world

Africa’s and Asia’s labour force will have more than doubled between 1990 and 2020

It is unlikely that employment can catch up with the growth of the labour force

Migration pressure to areas with high(er) employment

Global active population will start to shrink after 2020

LA POPULATION ACTIVE DIMINUE
Evolution du nombre des 20-64 ans d’ici à 2050

Source: Primeview
4. To deliver economies in education, care and health
New demographic reality

Demographic deficit could lead to stagnation of economic output

Rise of age-related expenditure

Ageing population and shrinking work force

EU-27 Projected age-related expenditure (2010-2060), percentage points of GDP

Source: Commission Services, EPC (2012)

Number of Alzheimer’s cases projected to triple until 2050

Demographic deficit could lead to stagnation of economic output

5. To offer training, decent wages and carriers outside the hyper-productive sectors
## Hyper-productive contrasts with hypo-productive

<table>
<thead>
<tr>
<th>Company</th>
<th>Capitalisation (in billion €)</th>
<th>Number of employees</th>
<th>Reported capitalisation/ Number of employees</th>
</tr>
</thead>
<tbody>
<tr>
<td>Facebook</td>
<td>89.6</td>
<td>4 619</td>
<td>19 388 516 €</td>
</tr>
<tr>
<td>Twitter</td>
<td>18.0</td>
<td>2 300</td>
<td>7 826 087 €</td>
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<tr>
<td>Renault</td>
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<td>127 086</td>
<td>154 226 €</td>
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<td>Veolia</td>
<td>6.7</td>
<td>318 373</td>
<td>21 044 €</td>
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</tbody>
</table>

Source: L’Expansion, No 790, December/January 2013, p. 36-37
Inequalities on the rise

Source: L’Expansion, No 790, December/January 2013, p. 36-37
Differences in labour market outcomes of low- and high-skilled workers seem to be growing.

Vulnerable groups and inequality

Increased demand for specialised skills in IT, science, engineering and technology

Potential specific skills shortages in softer sectors, such as health, mental or social care

Unemployment rates by qualification category, EU-27+

- Internet has created 2.6 jobs for every one destroyed
- Differences in labour market outcomes of low- and high-skilled workers seem to be growing


Source: Cedefop (2010), based on IER estimates; EU-27+ includes EU Member States, Norway and Switzerland;
As cited in: 'An analysis of global societal trends and their impact on the EU' by RAND Europe, ESPAS Seminar, Brussels, 15 Nov 2013