Regional Innovation & development through the psychology of a PIG
George Strogylopoloulos, Chairman, Logotech SA
Not the most innovative pig
Categorisation of OECD regions: map of three macro categories

Source: OECD calculations using the OECD Regional Database displayed using the OECD eXplorer. This map is for illustrative purposes and is without prejudice to the status of or sovereignty over any territory covered by this map. Maps may be cropped and repositioned for ease of display.
Perceived government procurement of advanced technology products, 2009
Employment in Knowledge-Intensive Activities as % of total employment, 2009
Employment in KIAs as % of total employment, average annual growth 2000-2008
Average annual growth (%), 2000-2009

R&D Intensity (Gross domestic expenditure on R&D (GERD) as % of GDP)

- Employment in knowledge intensive activities as % of total employment
- Business enterprise expenditure on R&D (BERD) as % of GDP
- Licence and patent revenues from abroad as % of GDP
- Public expenditure on R&D as % of GDP
- PCT patent applications per billion GDP (PPSE)
- New doctoral graduates (ISCED 6) per thousand population aged 25-34
- PCT patent applications in societal challenges per billion GDP (PPSQ)
- Researchers (FTE) per thousand labour force
- Scientific publications within the 10% most cited scientific publications worldwide as % of total scientific publications of the country
- International scientific co-publications per million population

Source: DG Research and Innovation
Data: Eurostat, OECD, Science Metrix / Scopus (Elsevier)
Notes: (1) Growth rates which do not refer to 2000-2009 refer to growth between the earliest available year and the latest available year over the period 2000-2010.
(2) The EU value refers to the median rather than to the average
(3) Average annual growth refers to real growth.
(4) EU refers to extra-EU.
(5) Elements of estimation were involved in the compilation of the data.
Figure 4.1. Patents per million inhabitants, average 2005-07

Note: Counts are based on patent applications filed under the Patent Cooperation Treaty (PCT), at international phase, by priority date and inventor’s region of residence, using fractional counts. The regional breakdown is provided at Territorial level 3 (TL3). This map is for illustrative purposes and is without prejudice to the status of or sovereignty over any territory covered by this map. The map is cropped for ease of display.

Source: OECD Regional Statistics Database and OECD REGPAT Database.

StatLink: http://dx.doi.org/10.1787/888932520688
Scientific publications within the 10% most cited publications worldwide as a % of total scientific publications of the country, 2007-2009
GREECE

R&D Intensity projections, 2000-2020(1)

Source: DG Research and Innovation
Data: DG Research and Innovation, Eurostat
Notes: (1) The R&D Intensity projections based on trends are derived from the average annual growth in R&D Intensity for 2000-2009 in the case of the EU and for 2001-2007 in the case of Greece.
(2) EU: This projection is based on the R&D Intensity target of 3.0% for 2020.
(3) EL: This projection is based on a tentative R&D Intensity target of 2.0% for 2020.
### Greece R&D Profile, 2009

<table>
<thead>
<tr>
<th>Indicator</th>
<th>Greece</th>
<th>Reference Group (EL+LV+LT+MT)</th>
<th>EU</th>
<th>United States</th>
</tr>
</thead>
<tbody>
<tr>
<td>R&amp;D Intensity (Gross domestic expenditure on R&amp;D (GERD) as % of GDP)</td>
<td>2.01</td>
<td>2.77</td>
<td>2.01</td>
<td>2.01</td>
</tr>
<tr>
<td>Business enterprise expenditure on R&amp;D (BERD) as % of GDP</td>
<td>0.16</td>
<td>0.17</td>
<td>0.42</td>
<td>0.43</td>
</tr>
<tr>
<td>Public expenditure on R&amp;D as % of GDP</td>
<td>0.8</td>
<td>0.8</td>
<td>0.8</td>
<td>0.65</td>
</tr>
<tr>
<td>New doctoral graduates (ISCED 6) per thousand population aged 25-34</td>
<td>1.6</td>
<td>1.6</td>
<td>1.6</td>
<td>1.6</td>
</tr>
<tr>
<td>Researchers (FTE) per thousand labour force</td>
<td>4.2</td>
<td>4.4</td>
<td>6.3</td>
<td>9.2</td>
</tr>
<tr>
<td>International scientific co-publications per million population</td>
<td>347</td>
<td>386</td>
<td>438</td>
<td>491</td>
</tr>
<tr>
<td>Scientific publications within the 10% most cited publications worldwide as % of total scientific publications of the country</td>
<td>0.01</td>
<td>0.01</td>
<td>0.01</td>
<td>0.01</td>
</tr>
<tr>
<td>PCT patent applications in societal challenges per billion GDP (PPSE)</td>
<td>0.44</td>
<td>0.47</td>
<td>0.64</td>
<td>0.94</td>
</tr>
<tr>
<td>PCT patent applications per billion GDP (PPSE)</td>
<td>0.06</td>
<td>0.21</td>
<td>0.21</td>
<td>0.64</td>
</tr>
<tr>
<td>Licence and patent revenues from abroad as % of GDP</td>
<td>0.13</td>
<td>0.13</td>
<td>0.13</td>
<td>0.13</td>
</tr>
<tr>
<td>Contribution of high-tech and medium-high-tech manufactured goods to the trade balance</td>
<td>0.21</td>
<td>0.21</td>
<td>0.21</td>
<td>0.64</td>
</tr>
<tr>
<td>Employment in knowledge intensive activities as % of total employment</td>
<td>31.6</td>
<td>31.0</td>
<td>35.1</td>
<td>35.1</td>
</tr>
</tbody>
</table>

**Source:** DG Research and Innovation

**Data:** Eurostat, OECD, Science Metrix/Scopus (Elsevier)

**Notes:**
1. The values refer to 2009 or to the latest available year.
2. The EU value refers to the median rather than to the average.
3. EU refers to extra-EU.
4. (i) EU does not include BG, CY, LV, LT, MT, RO; (ii) EU refers to extra-EU; (iii) LV, LT and MT are not included in the Reference Group.
5. Elements of estimation were involved in the compilation of the data.
the feelings
talking about the regions
Regional performance in GDP per capita over time, 1980 and 2007

Greece (TL2)

2007 GDP pc (100 = national value)

160
150
140
130
120
110
100
90
80
70

1980 GDP pc (100 = national value)

70
80
90
100
110
120
130
140
150
160

Attiki
Nisia Aigaiou, Kriti
Voreia Ellada
Kentriki Ellada
Sub-national government capital expenditures as a percentage of GDP, 2007 and 2009


StatLink: http://dx.doi.org/10.1787/888932520612
Total expenditure by level of government, 2008

Source: OECD Fiscal Decentralisation Database, www.oecd.org/document/32/0,3746,en_2649_35929024_47467040_1_1_1_1,00.html. StatLink  http://dx.doi.org/10.1787/888932520517
# Reduced central government financial support to sub-national government, 2011-13

## Main measures adopted at the sub-national level

<table>
<thead>
<tr>
<th>Country</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>France</td>
<td>The main transfer to SNGs, the <em>Dotation Globale de Fonctionnement</em>, to be frozen at the 2010 level until 2013.</td>
</tr>
<tr>
<td>Germany</td>
<td>The federal government adopted a new fiscal rule in March 2009 that will limit the cyclically adjusted budget deficit of the federal government to a maximum of 0.35% of GDP and require balanced cyclically adjusted budgets for the <em>Länder</em>. It will become binding for the central government in 2016 and for the <em>Länder</em> in 2020. A longer transitional period has been agreed for the <em>Länder</em>, since some are experiencing serious consolidation problems. No borrowing limits have been specified for municipalities and social security funds. To comply with the new fiscal rule, the German government has to reduce the structural deficit at the federal level by about 0.3% of GDP each year until 2016.</td>
</tr>
<tr>
<td>Greece</td>
<td>The government is planning a freeze pay for all public sector workers, at all levels of government.</td>
</tr>
<tr>
<td>Italy</td>
<td>Italy adopted a EUR 25 billion austerity package for 2011-12, with a cut in EUR 8.5 billion in ‘regions’ budgets over the next two years.</td>
</tr>
<tr>
<td>Korea</td>
<td>Significant spending reductions are planned for the environment (5.3%), general public administration (4.1%) and education (3.6%).</td>
</tr>
<tr>
<td>Mexico</td>
<td>The federal revenue sharing (FRS), the main federal revenue available for sub-national entities, decreased by more than 14% in 2009.</td>
</tr>
<tr>
<td>Portugal</td>
<td>EUR 100 million reduction in transfer payments from central to local government.</td>
</tr>
<tr>
<td>Spain</td>
<td>EUR 1.2 billion cut in local and regional governments. EUR 6 billion cut in public-sector investment.</td>
</tr>
<tr>
<td>United Kingdom</td>
<td>The United Kingdom adopted a severe austerity plan, with GBP 780 million (EUR 890 million) cuts in the Department for Communities and Local Government, and a GBP 1.2 billion (EUR 1.37 billion) reduction in local authority grants.</td>
</tr>
<tr>
<td>United States</td>
<td>Many state governments are likely to pull back on transfers to municipalities.</td>
</tr>
</tbody>
</table>

GREEK INNOVATION SYSTEM
WWW.GSRT.GR

- 12 research centers covering the following disciplines:
  - natural sciences (33 institutes)
  - engineering (7 institutes)
  - information technologies (7 institutes)
  - social sciences (4 Institutes)
  - humanities (5 Institutes)

- S&T Parks and Incubators for the development of innovative and knowledge-intensive enterprises:
  - 7 public S&T Parks (Athens, Crete, Patra, Thessaloniki, Epirus, Thessalia, Lavrion)
  - 8 Incubators with private sectors’ participation (Athens, Thessaloniki)
Regional Innovation Poles (RIP) promoting the development of integrated strategy for innovation at regional level, in areas of great interest for each region in the following regions with the participation of public and private entities:

- **Central Macedonia**
  - priority areas: ICT technologies

- **Thessaly**
  - priority areas: Biofuels, Foods and Textile

- **Western Greece**
  - priority areas: ICT Technologies, Food, Environment

- **Crete**
  - priority areas: ICT Technologies, Biotechnology and Medical Technologies

- **Western Macedonia**
  - priority areas: energy
The most problematic factors for doing business

- Inefficient government bureaucracy: 26.5%
- Tax regulations: 15.8%
- Restrictive labor regulations: 12.6%
- Corruption: 12.0%
- Tax rates: 6.5%
- Inadequate supply of infrastructure: 6.4%
- Policy instability: 6.1%
- Inadequately educated workforce: 3.3%
- Inflation: 3.2%
- Access to financing: 3.0%
- Poor work ethic in national labor force: 2.0%
- Government instability/coups: 1.4%
- Crime and theft: 0.9%
- Foreign currency regulations: 0.4%
- Poor public health: 0.1%
the efforts and changes
Haircut with unknown results
Some changes

13 regions, 54 prefectures and 1033 municipalities and communities was replaced by

7 decentralized administrations,
13 regions and 325 municipalities.

The regions and municipalities are fully self-governed, with the first elections to them having been held on 7 November and 14 November 2010.

The decentralized administrations are run by a general secretary appointed by the Greek Government.
Late 70s
<table>
<thead>
<tr>
<th>Axis</th>
<th>Description</th>
<th>8 Regions</th>
<th>%</th>
<th>5 Regions</th>
<th>%</th>
<th>Total</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Creation and exploitation of innovation supported by research and technology development</td>
<td>231</td>
<td>13%</td>
<td>428</td>
<td>29%</td>
<td>659</td>
<td>20%</td>
</tr>
<tr>
<td>2</td>
<td>Supporting entrepreneurship and extroversion</td>
<td>548</td>
<td>32%</td>
<td>398</td>
<td>27%</td>
<td>946</td>
<td>29%</td>
</tr>
<tr>
<td>3</td>
<td>Improving the business environment</td>
<td>428</td>
<td>25%</td>
<td>320</td>
<td>21%</td>
<td>748</td>
<td>23%</td>
</tr>
<tr>
<td>4</td>
<td>Completion of the country’s energy system and strengthening of sustainability</td>
<td>480</td>
<td>28%</td>
<td>352</td>
<td>23%</td>
<td>832</td>
<td>26%</td>
</tr>
<tr>
<td>5</td>
<td>Technical support to implementation</td>
<td>34</td>
<td>2%</td>
<td>0</td>
<td>0%</td>
<td>34</td>
<td>1%</td>
</tr>
<tr>
<td></td>
<td><strong>Total</strong></td>
<td><strong>1.721</strong></td>
<td></td>
<td><strong>1.498</strong></td>
<td></td>
<td><strong>3.219</strong></td>
<td></td>
</tr>
</tbody>
</table>
It's All Good!
That's All Folks