



OECD's Innovation Strategy: *Getting a Head Start on Tomorrow*



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ITIF Innovation Forum

Washington, DC

21 July 2010

www.oecd.org/innovation/strategy₁

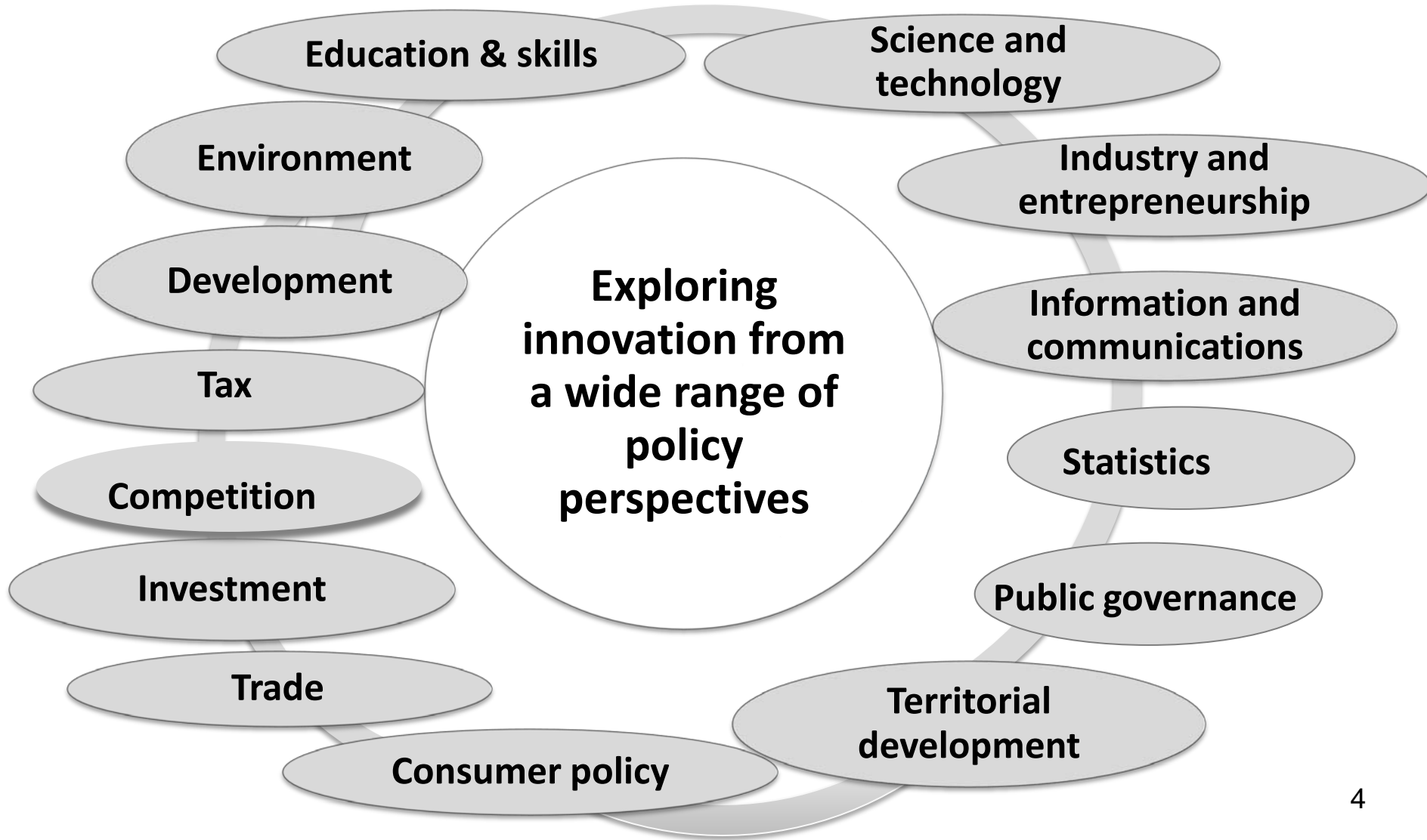
Overview

- **What is OECD's Innovation Strategy?**
- **What are some of the implications?**

What is OECD's Innovation Strategy?

A “horizontal” approach

Cutting across policy areas



A series of products

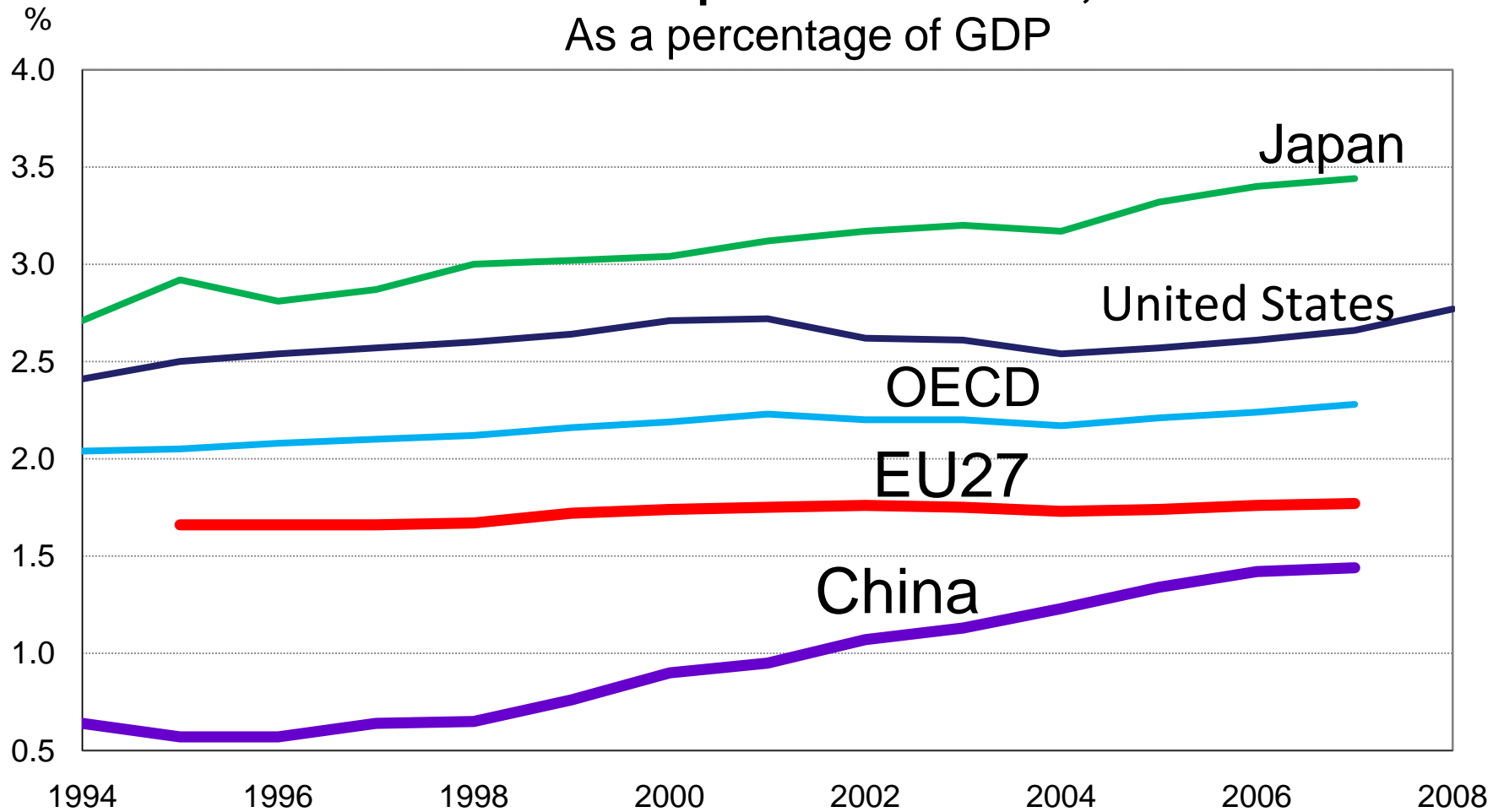
- A short **Ministerial paper** setting out the challenges and priorities for action on innovation, combined with a set of policy principles
- **An analytical report**, providing evidence on the main innovation drivers and processes and policy recommendations
- A **compendium of policy-relevant indicators** that will enable countries to benchmark themselves on a range of policies and measurements
- In-depth **thematic reports** on key issues
- The beginnings of a **policy handbook**, that will enable countries to examine their own performance and system, and provide **tools and examples** to take action.

What are some of the implications?

1. Innovation today involves the interaction of a system:
R&D is only one element

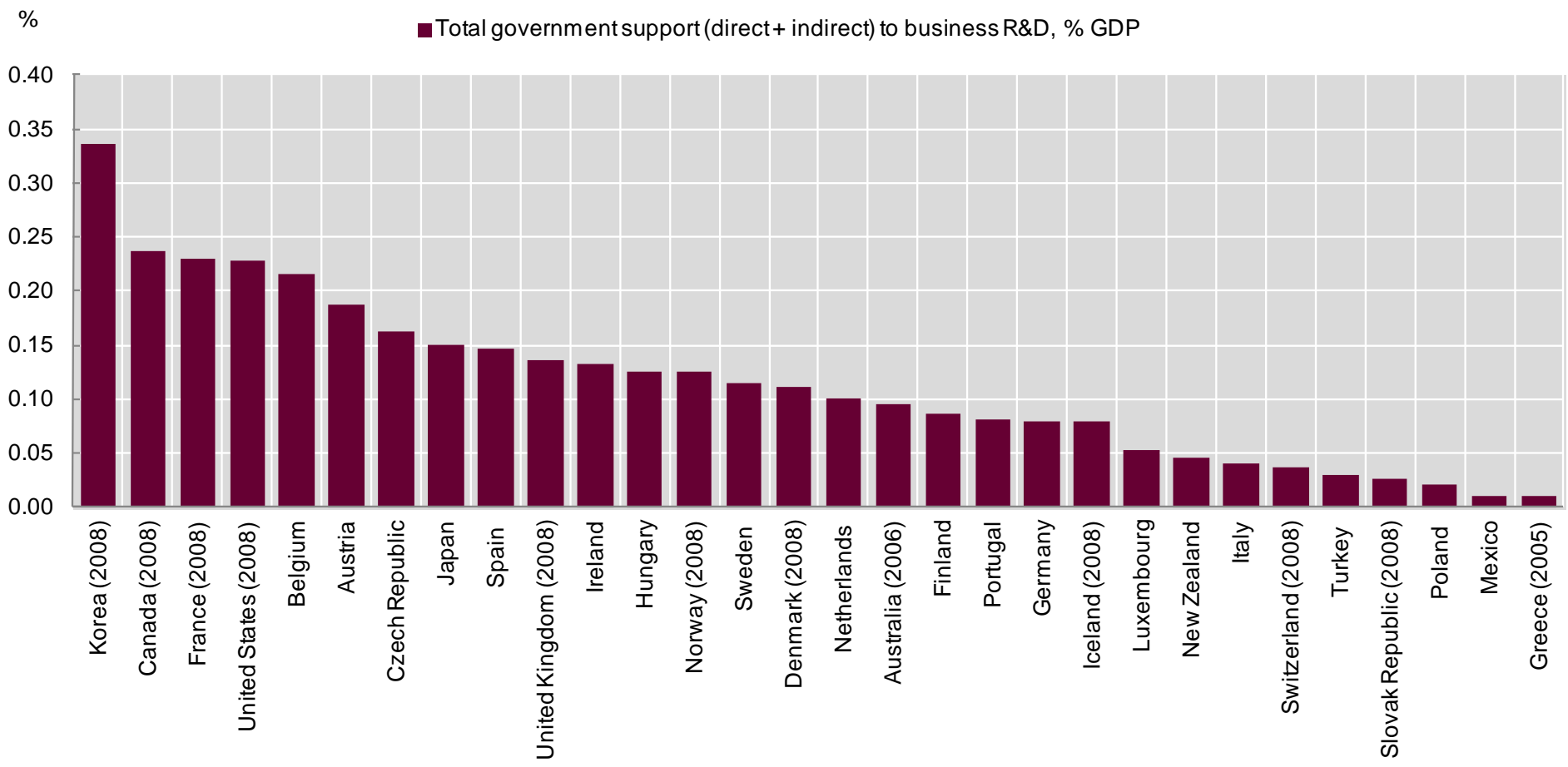
R&D is critical to innovation...

Gross domestic expenditure on R&D, 1994-2008
As a percentage of GDP



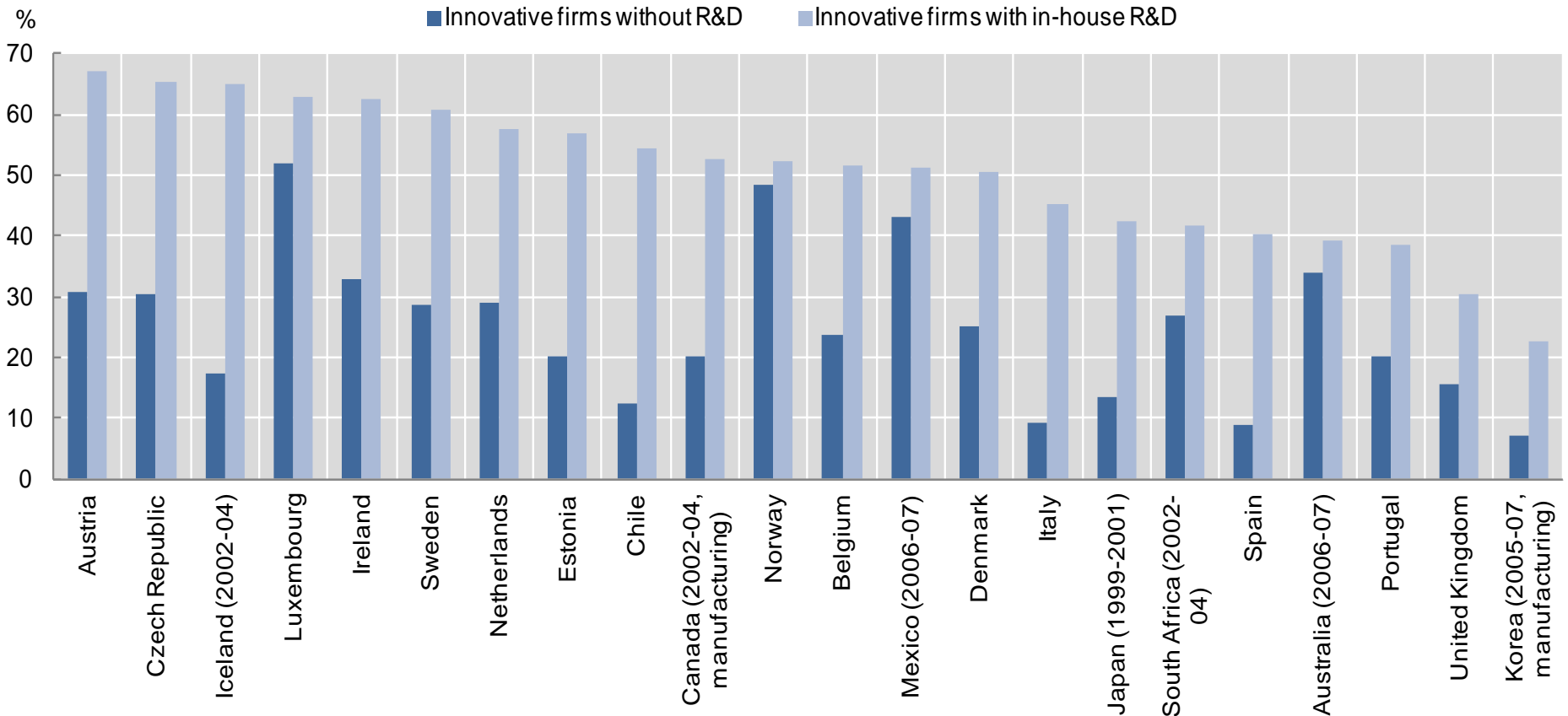


...and is the main focus of public support.



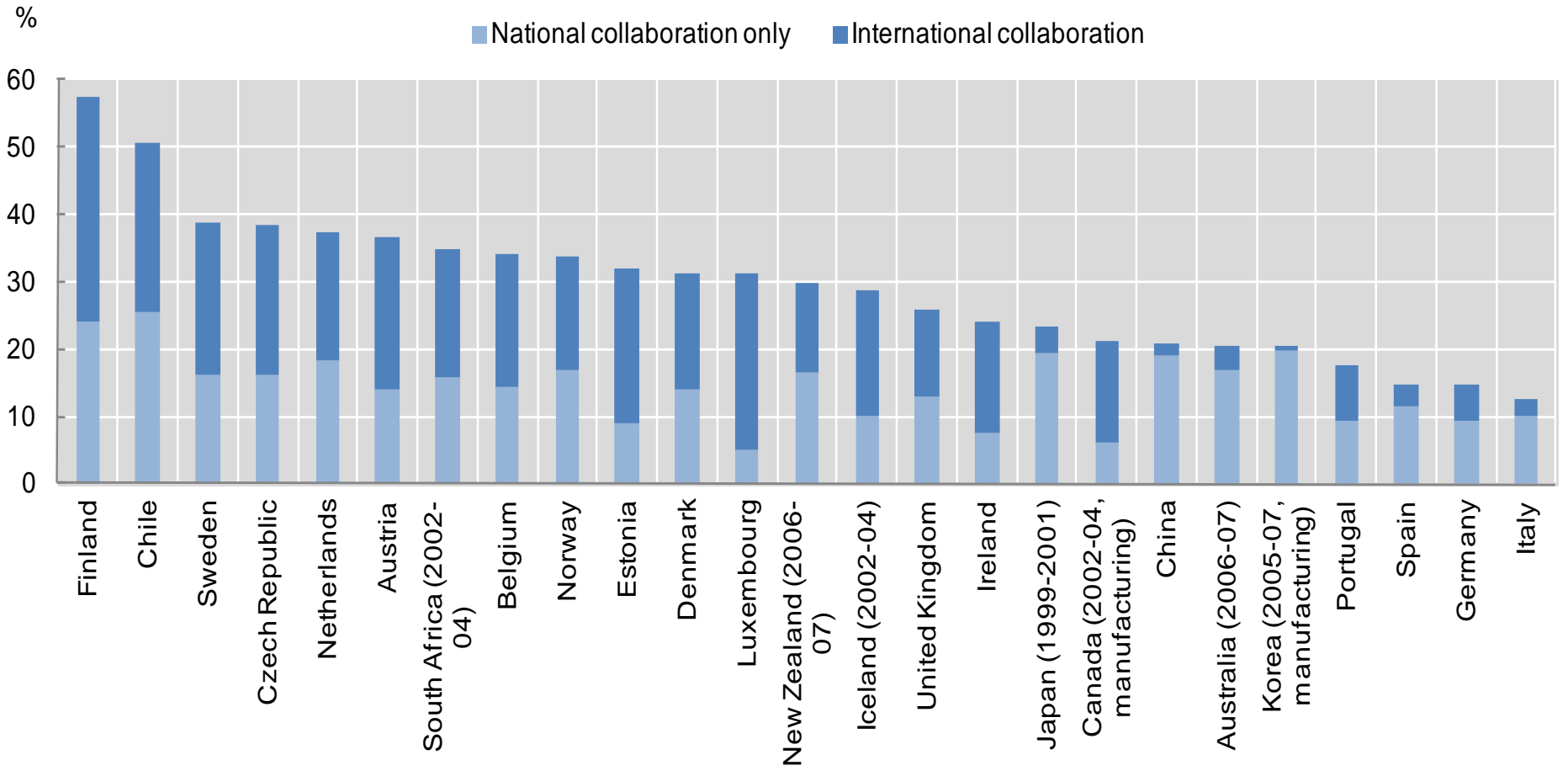
But innovation is more than R&D.

New-to-market product innovators, 2004-06 As a percentage of innovative firms by R&D status



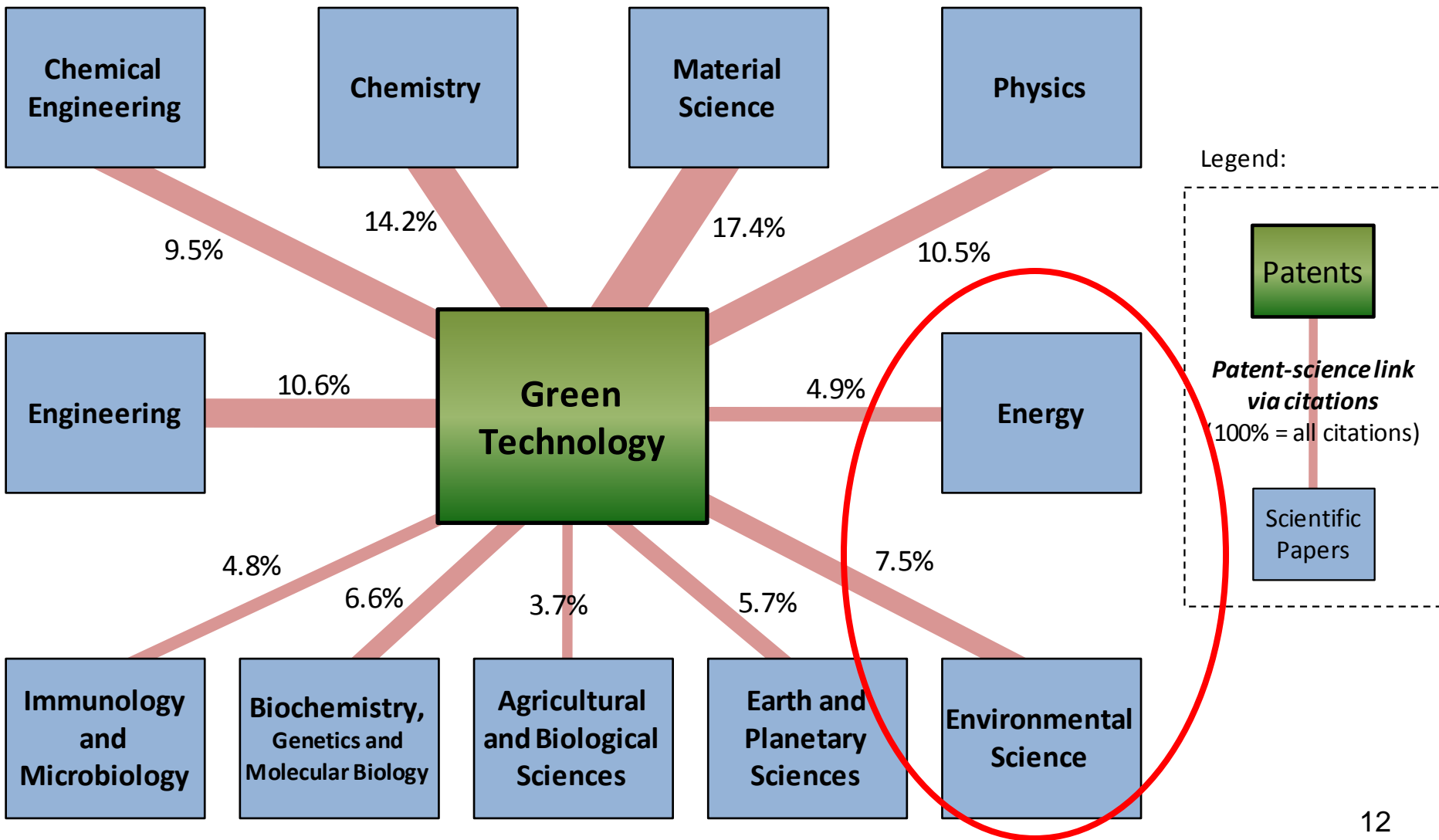
Firms collaborate with each other.

Firms with national/international collaboration on innovation, 2004-06
 As a percentage of innovative firms



Innovation is multidisciplinary.

Scientific publications cited by “green” patents



Source: OECD (2010), *Measuring Innovation: A New Perspective*, OECD, Paris.

Policy Implications for a more collaborative mode of innovation

- ***Erect bridges*** between the different parts, forming or joining a network – not necessarily more or new hard infrastructure.
- Building networks through ***labour mobility***.
- Use of ***ICT*** to build networks; ***informatics*** as a multidisciplinary field and ***public depositories of information*** as a platform for innovation;
- Developing ***knowledge networks and markets***;

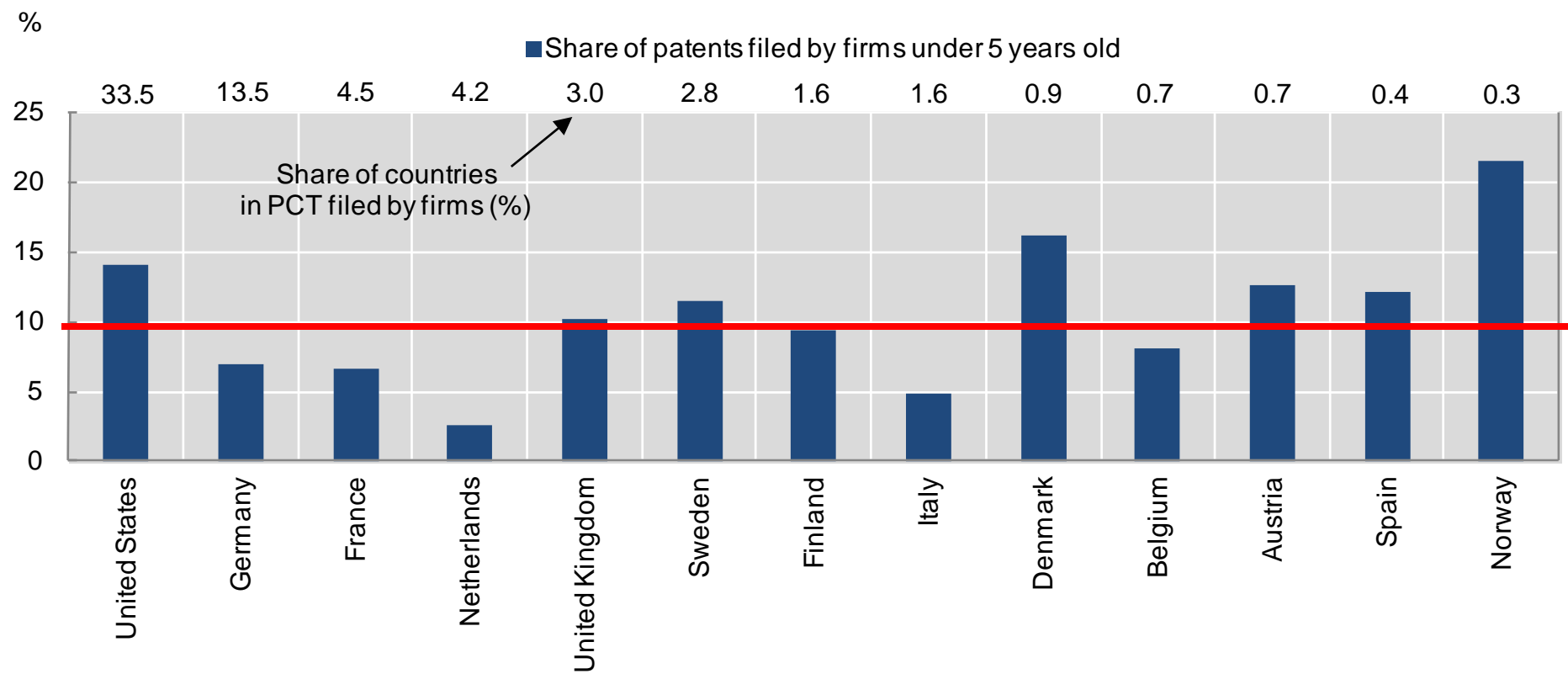
Finding 2: The mix of actors is changing.

- **Need to broaden our perspective from:**
 - Multinational Enterprises
 - Public research organisations & universities
 - the G7.

New firms are very important to innovation...

Patenting activity of young (<5 years) firms, 2005-07

PCT patent filings by young firms as a percentage of filings by firms in each country



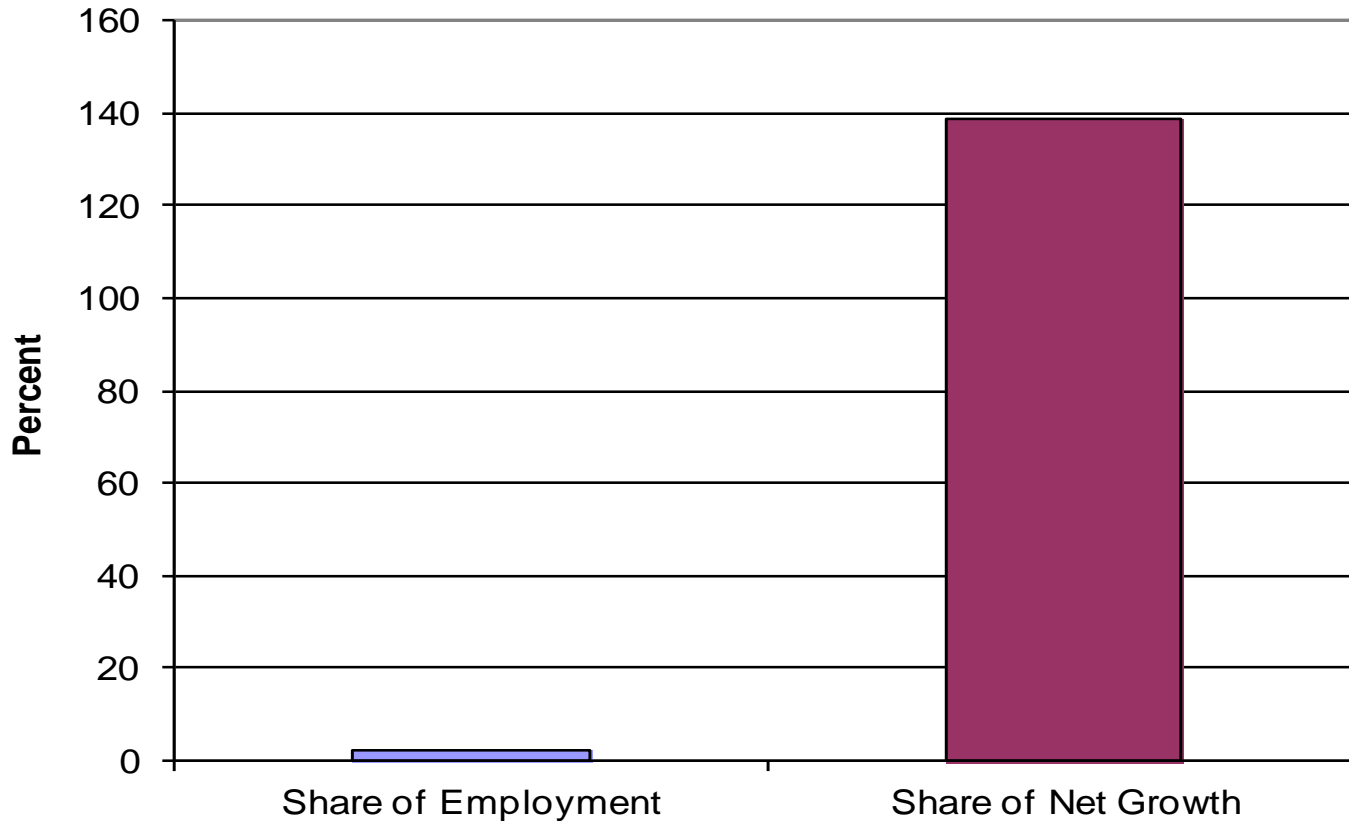
Source: OECD (2010), *Measuring Innovation: A New Perspective*, OECD, Paris.

Note : Data refers to patent applications filed under the Patent Co-operation Treaty (PCT) with a priority in 2005-07. Patent counts are based on the country of residence of the applicants. The share of young firms is derived from the set of patent applicants successfully matched with business register data.

...and job creation.

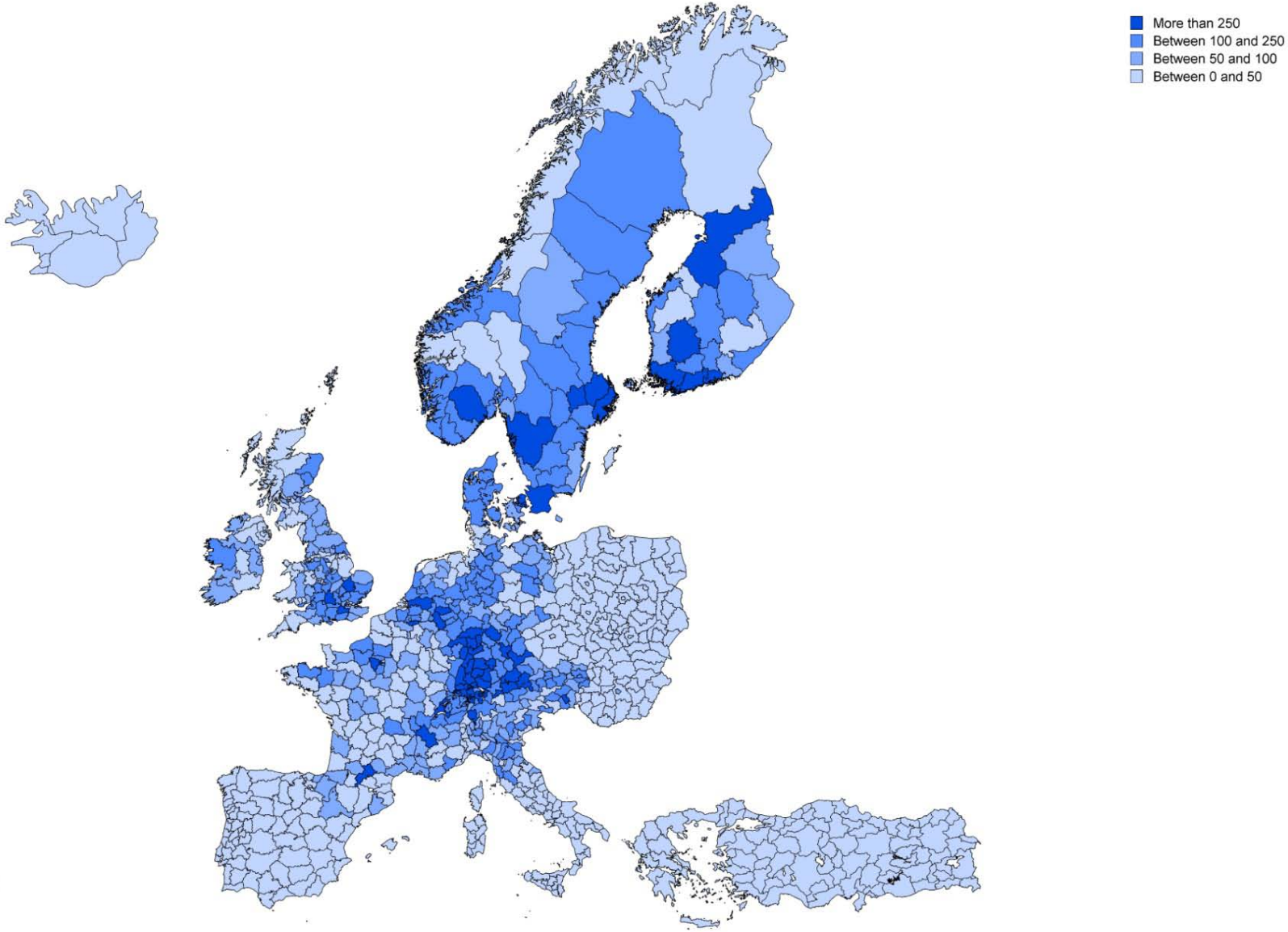
Contribution of business start-ups to overall employment and the net employment growth (US, 1992-2005)

□



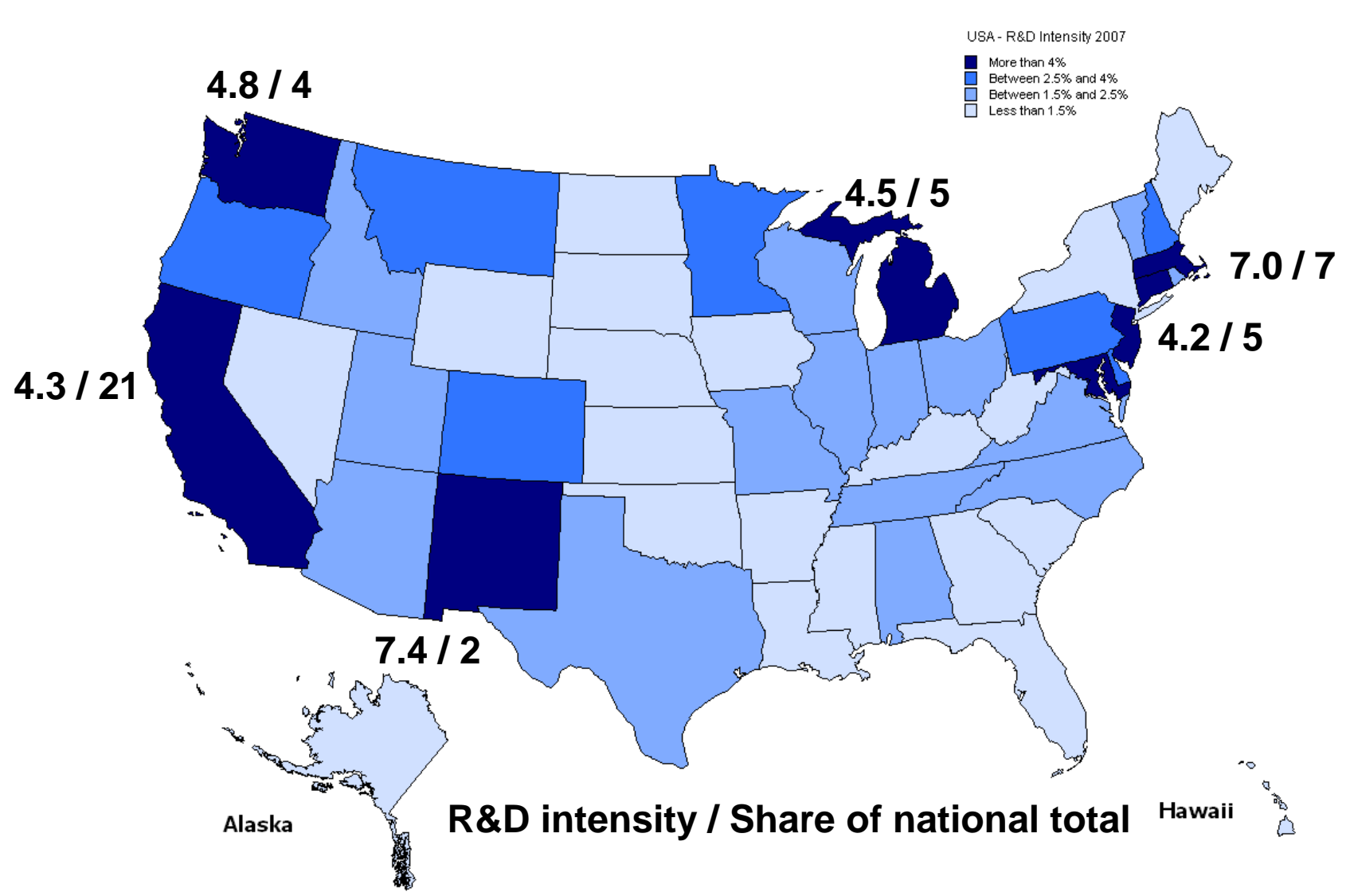
Innovation is not “flat” ...

Patents per million inhabitants, average 2005-07



...it is spiky.

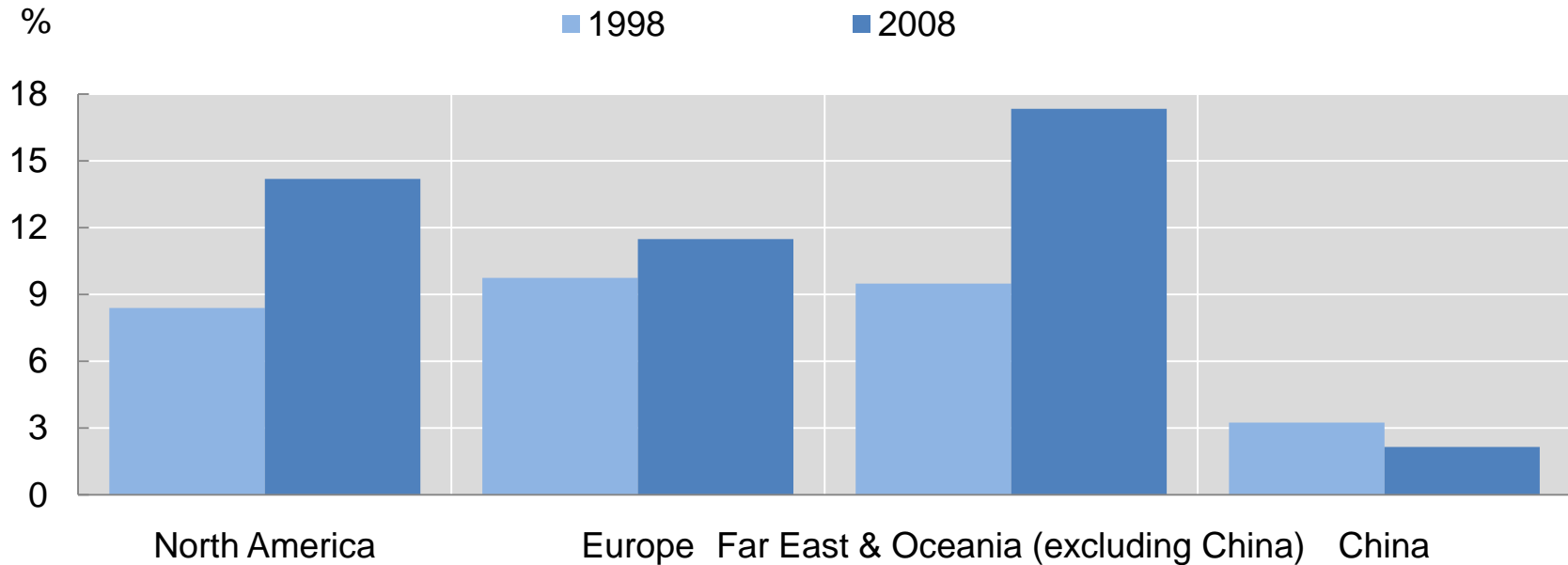
R&D per GDP, 2007



Source: OECD (2010), *Regional Database July 2010*.

New players are emerging, spreading innovative capabilities...

Scientific collaboration with BRIC countries, 1998 and 2008 As a percentage of total international co-authored articles



Source: OECD (2010), *Measuring Innovation: A New Perspective*, OECD, Paris based on Scopus Custom Data, Elsevier, December 2009.

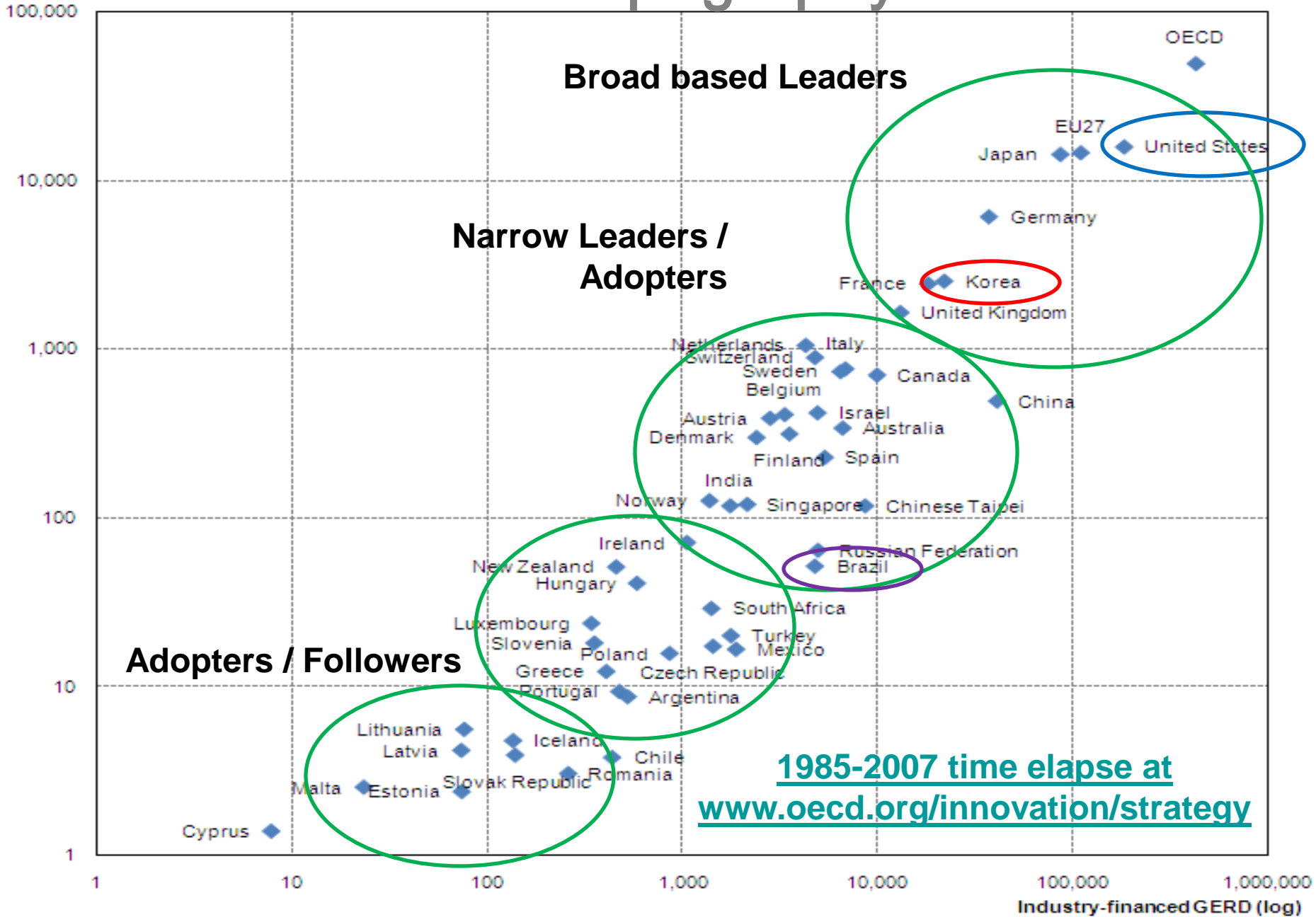
Notes: Only countries with more than 500 publications, and/or EU27 and OECD countries are tabulated.

North America: the United States, Canada and Mexico.

Europe: Austria, Belgium, Bulgaria, Belarus, Switzerland, Cyprus, the Czech Republic, Germany, Denmark, Estonia, Spain, Finland, France, the United Kingdom, Greece, Croatia, Hungary, Ireland, Iceland, Italy, Lithuania, Luxembourg, Latvia, Malta, the Netherlands, Norway, Poland, Portugal, Romania, Sweden, Slovenia, the Slovak Republic and Ukraine.

Far East & Oceania: Australia, Indonesia, Japan, Korea, Malaysia, New Zealand, Singapore, and Thailand.

...that alter the topography of innovation.



1985-2007 time elapse at
www.oecd.org/innovation/strategy

Policy Implications of global networks of innovation

- ***Build absorptive capacity:*** skills, institutions, access to networks;
- Importance of **services** as a means of capturing value locally & gaining access to lead-users;
- **Universities** are an essential node in innovation systems that can be the glue between actors, a local anchor into global networks and a magnet for global talent.
- **Building on existing strengths** for dynamic comparative advantage through innovation.

Finding 3. Innovation is already a fundamental economic investment...

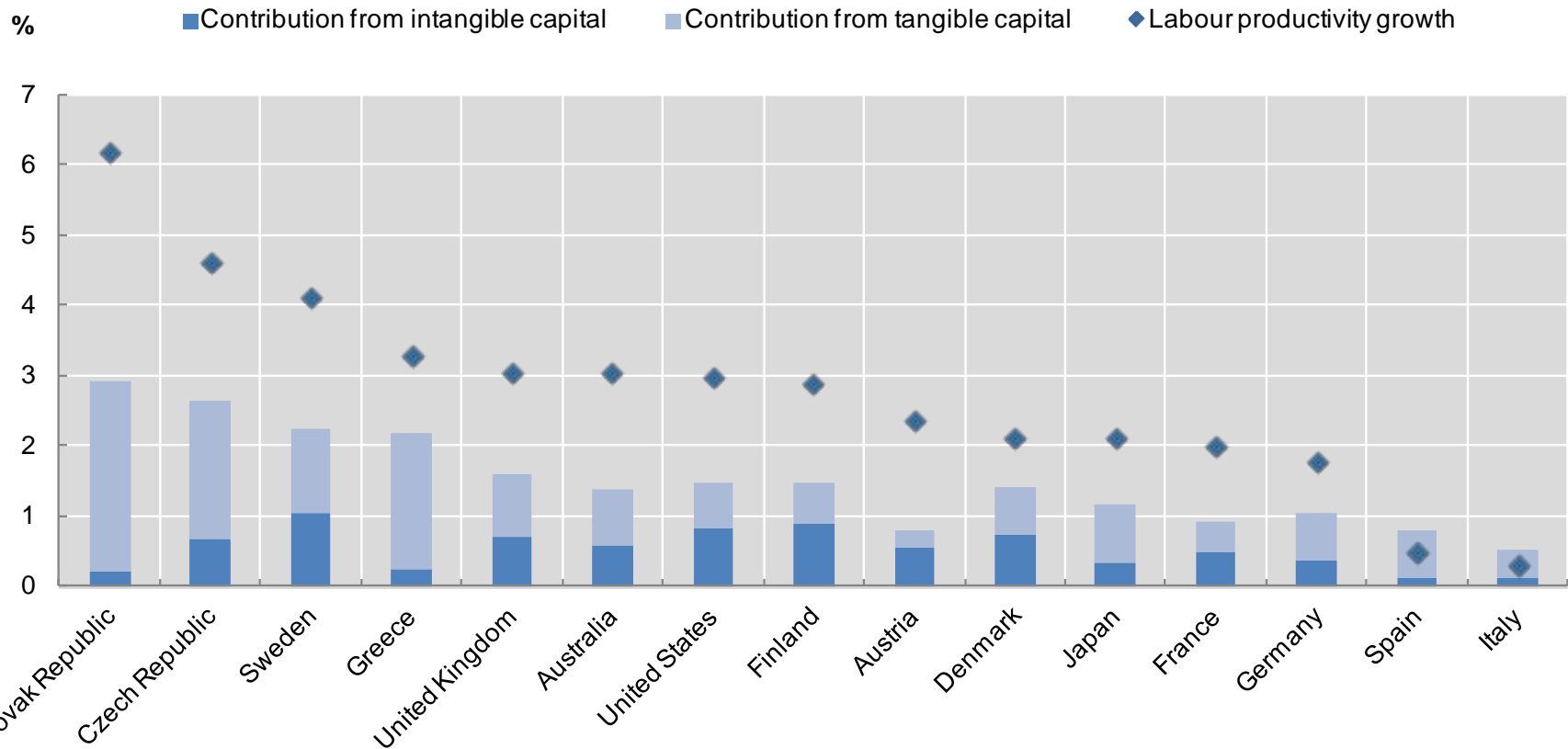
Investment in fixed and intangible assets as a share of GDP, 2006



Source: OECD (2010), *Measuring Innovation: A New Perspective*, OECD, Paris based on COINVEST [www.coinvest.org.uk] and research papers, 2009.

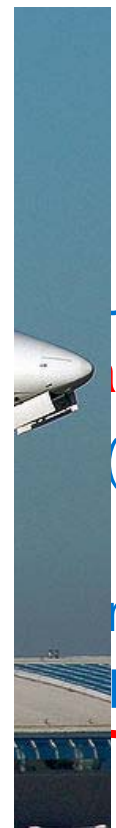
...and a driver of growth.

Innovation accounts for a large share of Labour Productivity growth Percentage contributions, 1995-2006 (or nearest available period)



21st Century Innovation: the iPod

The Apple



value added

US (Apple)
il US (Apple)
(Toshiba)
from Asia
from the US
by China

Store (2003)
al market share
ording companies

Policy Implications of Innovation as a key determinant of economic growth

- **“Now, more than ever”**: continue to support long-term investments in innovation (basic R&D);
 - Not an “on / off” incremental investment, but accumulative
 - Cutting spending could limit growth and the ability to address global challenges
- **Not all policies require large public investment**
 - *Reform and streamline* existing policies; *remove* barriers;
 - Use demand-side measures (procurement, standards);
 - Inject innovation into the public sector (e-Gov).
- **Better understand the broader role of innovation and its impact on economic growth**

Conclusion:

Develop a *Strategy* for Innovation

- A “horizontal” approach:
 - Leadership & long-term vision;
 - Co-ordination via the budget;
 - Seek coherence: young \neq small;
 - Division of labour with regions: build on indigenous strengths; seek a critical mass.
- Evaluate & monitor through improved measures (measurement agenda);
- Better measures to reflect the central role of Innovation to the economy

Implications for the US

- The US Innovation system is the envy of the world *but it is the wrong time to be complacent;*
- The jewel in the crown – *US Universities* – are under tremendous pressure;
- Need to develop the ability to *absorb* good ideas developed abroad as a complement to indigenous development.
- Inevitably US advantages are being reduced: scale (C&I); entrepreneurship; ICT.

www.oecd.org/innovation/strategy

For more information

Go to the web:

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