



ORGANISATION FOR ECONOMIC  
CO-OPERATION AND DEVELOPMENT

Connect Research 2009 – New Models  
of Innovation for Economic Growth and  
Sustainability  
Paris, 12-13 November 2009



**Innovation Today – Why it  
Matters for Growth and  
Sustainability**

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**Outline**

1. Why does innovation matter today?
2. How has innovation changed?
3. Innovation in the crisis
4. Looking ahead

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## I. Why innovation matters (today)

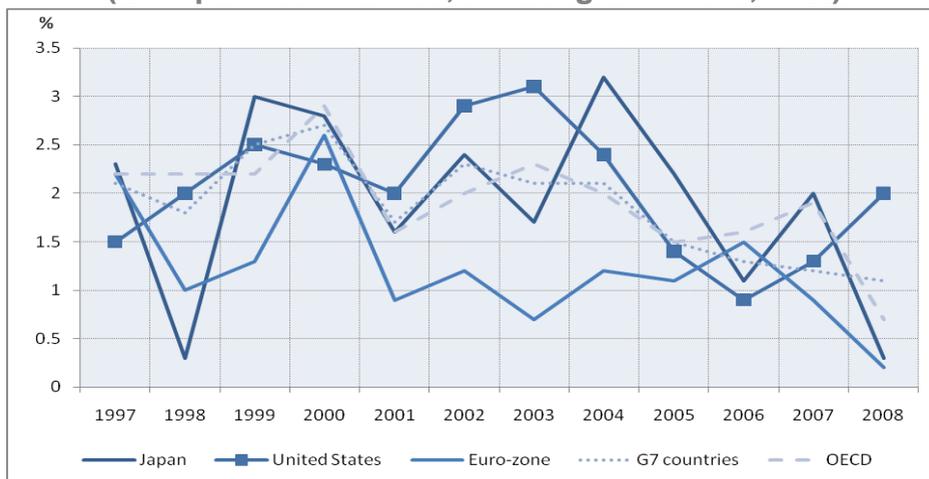
- Our growth path before the crisis was not sustainable:
  - Stronger productivity growth to increase potential output growth, in particular following the crisis.
  - Some innovations have contributed to a non-sustainable growth path.
  - Address global problems, e.g. climate change, food security, health, energy.
  - Public sector innovation of growing importance.
- How can innovation help to move to stronger, cleaner and fairer economic growth?

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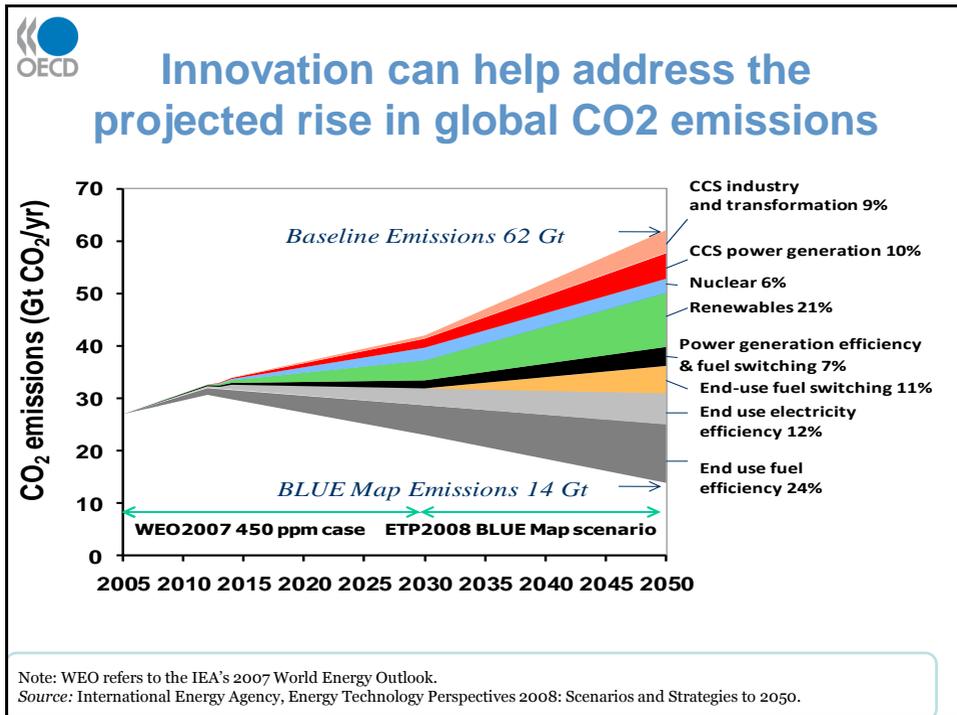


## Productivity had started to slow down prior to the crisis

(GDP per hour worked, annual growth rate, in %)



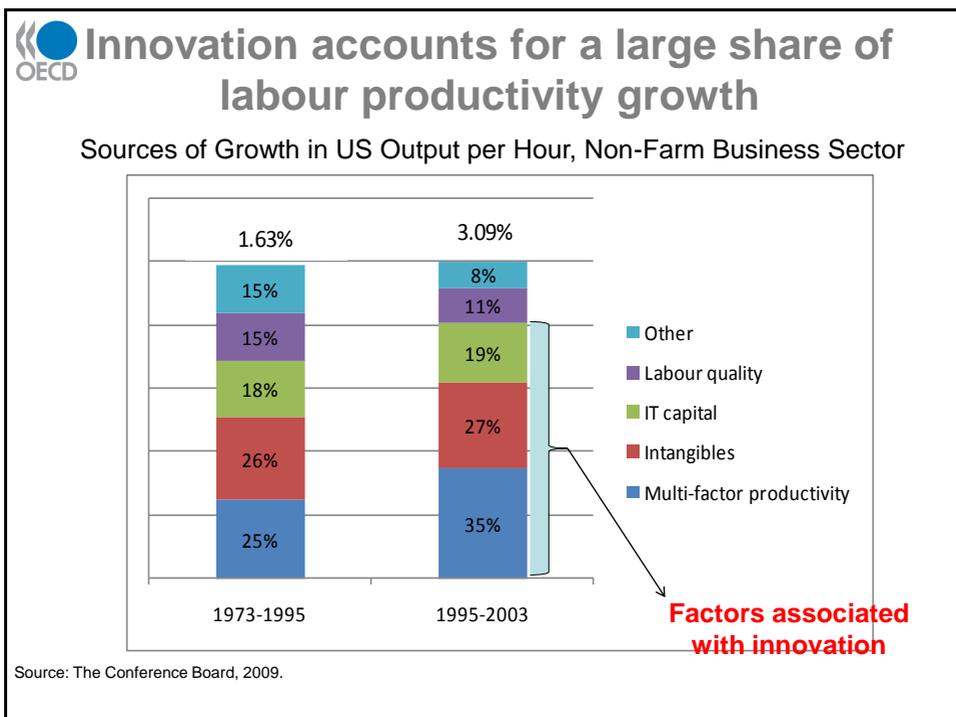
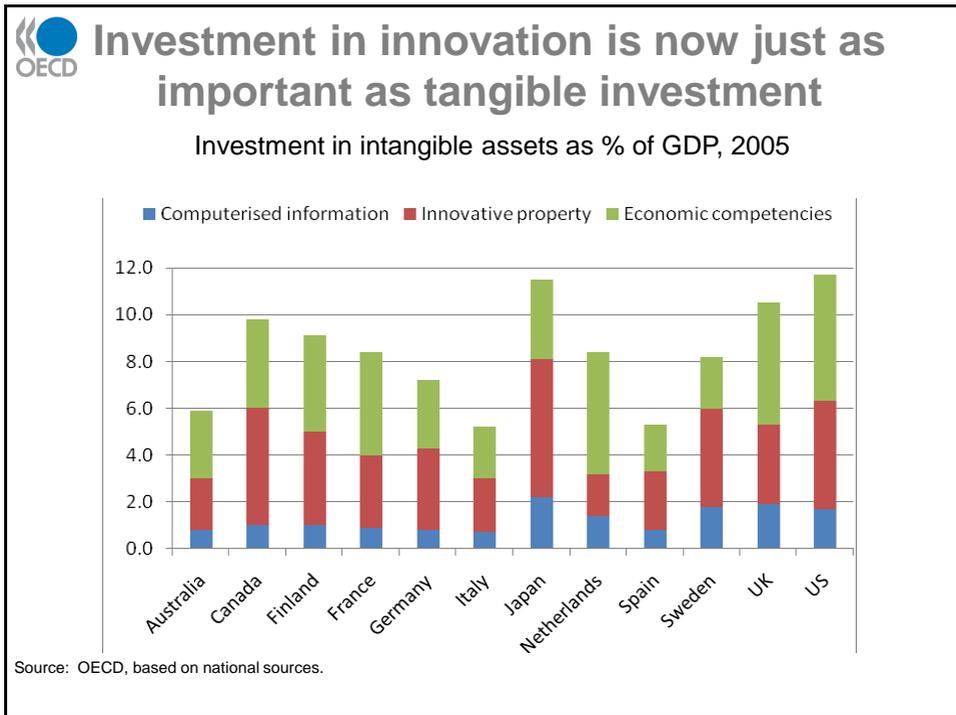
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 **II.**  
**The characteristics of innovation today**

- A wide range of investments – much more than R&D
- A large contribution to productivity growth
- More collaborative and open
- A broader notion of innovation
- New players and a global system
- Greater participation, enabled by the Internet
- More actors

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## Firms today no longer innovate in isolation

### Then: Closed Innovation

❑ Approach: “not invented here”

❑ Innovation:

- Strategy independent of overall business strategy
- Performed in-house
- Internal pool of innovators

❑ Outputs:

- Incorporated in firm’s products and services.
- Product revenues finance next cycles of in-house R&D

### Now: “Open“ Innovation

❑ Approach: “proudly found elsewhere”

❑ Innovation:

- Business strategy drives targets
- Technology developed cooperatively or acquired
- Work with many innovators
- Leverage own IP

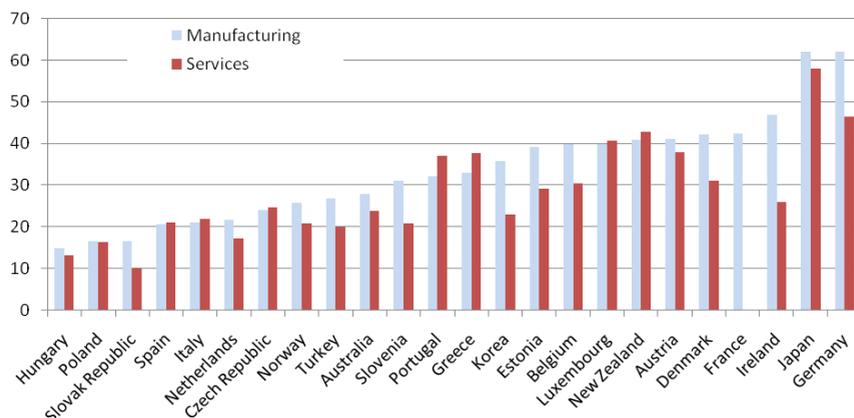
❑ Outputs:

- Both internalized and externalized (*licensing, spin-offs, venturing*)

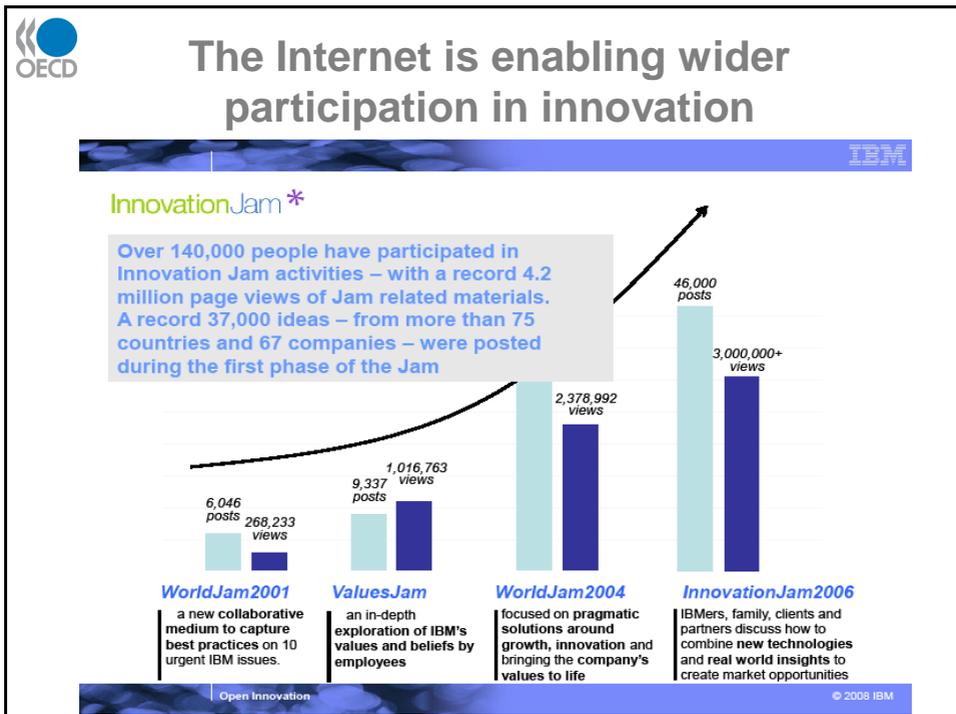
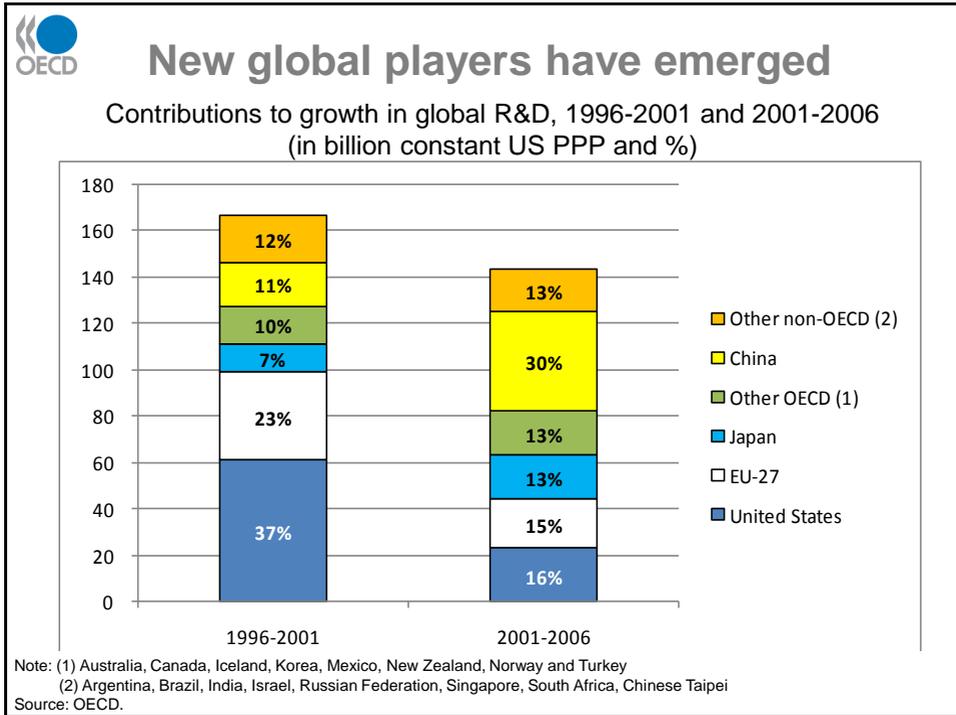


## Technology is only one approach to value creation

Non-technological innovators by sector, as a percentage of all firms, 2004-2006



Source: OECD, based on CIS and national sources.





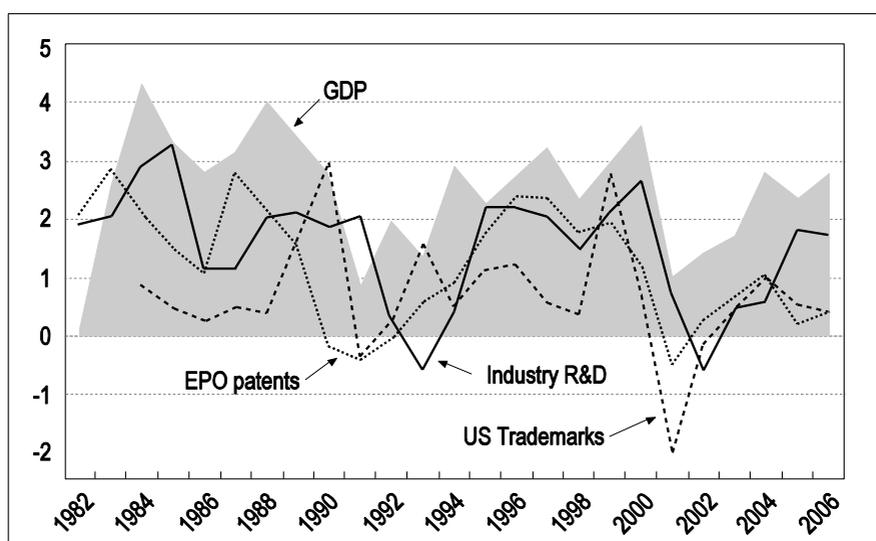
## More actors are involved

- Wide range of policies, Ministries, and levels of government – not just science and technology;
- Wide range of industries – not just high-tech;
- Wide range of actors, including NGOs and the public sector.
- Local clusters and global networks.
- A growing involvement of users in the innovation process: firms, governments, consumers, ...

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## III. Innovation in the Crisis - we know that it will suffer in the downturn ...





### ... as is confirmed by current trends

- Investment in R&D is falling in many firms:
  - A growing focus on development, instead of research.
  - Though some firms are increasing investment.
  
- Small firms are most affected:
  - Financial constraints are more pressing
  - Sharp increase in bankruptcies and insolvencies
  - New innovative firms have difficulties in entering and exiting (e.g. through IPOs).



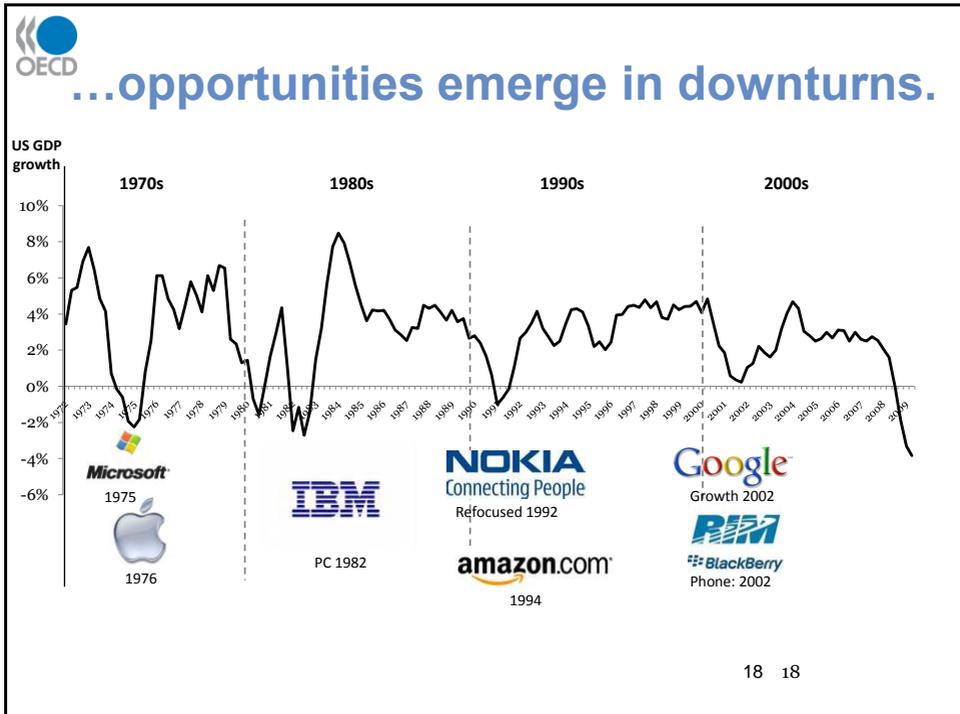
### The crisis has other impacts on innovation

- Consolidation is leading to less competition and increased risk aversion
- Fall in trade disrupts global innovation networks.
- Unemployment leads to depreciation of human capital
- **But** can also be an opportunity and game-changer
  - Will activate “creative destruction”...
  - Economic stimulus packages are full of measures that can strengthen innovation
  - Growing realisation that a new growth model is needed.

**OECD** The stimulus packages include “pro-innovation” elements and ...

	Infrastructure	R&D	Education	Green Technology
Australia	AUD 11.5 billion	AUD 580 mill.	AUD 17 billion	AUD 5.2 billion
Canada	CAD 20 billion	CAD 800 mill.	n.a.	CAD 4.6 billion
Finland	EUR 910 million	EUR 25 million	EUR 30 million	EUR 38 million
France	EUR 4.7 billion	EUR 46 million	EUR 731 mill.	EUR 30 million
Germany	EUR 20 billion	EUR 1.4 billion	EUR 19 billion	EUR 5 billion
Norway	NOK 3.8 billion	NOK 170 mill	NOK 270 mill.	NOK 1.6 bill
US	USD 100 billion	USD 16 billion	USD 157 bill	USD 54 billion

Rose is most important item. Blue is second most important.  
 OECD estimates, June 2009. 17





#### IV. OECD projections for a recovery depend on stimulus measures



- OECD has corrected its growth estimates upward.
- Recession could have been worse.
- But massive fiscal stimulus built into the projections - important that measures are implemented promptly
- Prospects of uncharacteristically weak recovery, with high debts and high unemployment
- **Already before the crisis and even more now:** Need to revive productivity growth to return to higher growth levels
- **Innovation will be key to growth and to addressing climate change and other social/global challenges.**

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### In sum

The crisis offers new opportunities to undertake structural change and help shape the future of OECD economies

More than ever, innovation is key:  
**stronger, fairer and cleaner growth**

OECD is elaborating a comprehensive policy approach:

- for **stronger innovation**, to be released in May/June 2010
- for **green growth**, to be launched in 2011.



## For further information

OECD Innovation Strategy:  
[www.oecd.org/innovation/strategy](http://www.oecd.org/innovation/strategy)

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## References to OECD work

- OECD on Innovation and the Crisis, [page](#)
- OECD (2009), Policy Responses to the Economic Crisis: Investing in Innovation for Long-term Growth, June 2009, <http://www.oecd.org/dataoecd/59/45/42983414.pdf>
- Interim report on the OECD Innovation Strategy, <http://www.oecd.org/dataoecd/1/42/43381127.pdf>
- OECD (2009), Green Growth : Overcoming the Crisis and Beyond, <http://www.oecd.org/dataoecd/4/40/43176103.pdf>
- OECD work on stimulus packages, <http://www.oecd.org/dataoecd/3/62/42421337.pdf>
- OECD interim economic assessment, September 2009, <http://www.oecd.org/dataoecd/10/32/43615812.pdf>

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