

Investment, Enterprise and Development Commission
5th session

29 April - 3 May 2013
Geneva

Investing in Innovation for Development
Background Note

By
Angel González Sanz
Chief, Policy Review Section
Science, Technology and ICT Branch
Division on Technology and Logistics
UNCTAD

The views expressed are those of the author and do not necessarily reflect the views of UNCTAD.



Investing in Innovation for Development

Background note for the Commission on Investment, Enterprise and Development



Angel González Sanz
Chief, Policy Review Section,
Science, Technology and ICT Branch,
Division on Technology and Logistics, UNCTAD

1 May 2013
Geneva, Switzerland

Contents

1 Finance as a key resource for innovation

2 Investment in innovation among countries

- Trends
- Instruments
- Success stories

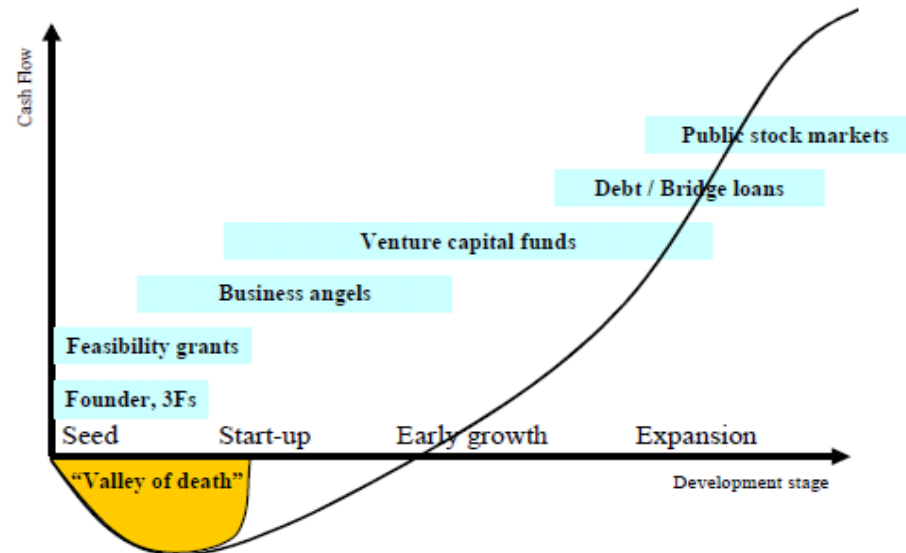
3 Conclusions and issues for discussion

Finance, a key resource for innovation

- Availability and modes of financing strongly influence technological development
- But finance is not the only factor enabling innovation:
 - Firms' learning capabilities
 - Coordination and collaboration frameworks
 - Research/industry linkages
 - Education, training
 - FDI, trade linkages
 - Entrepreneurship
 - Infrastructure...
- Investing in STI is not just about investing in R&D

Finance, a key resource for innovation

Financing instruments should match financing gaps



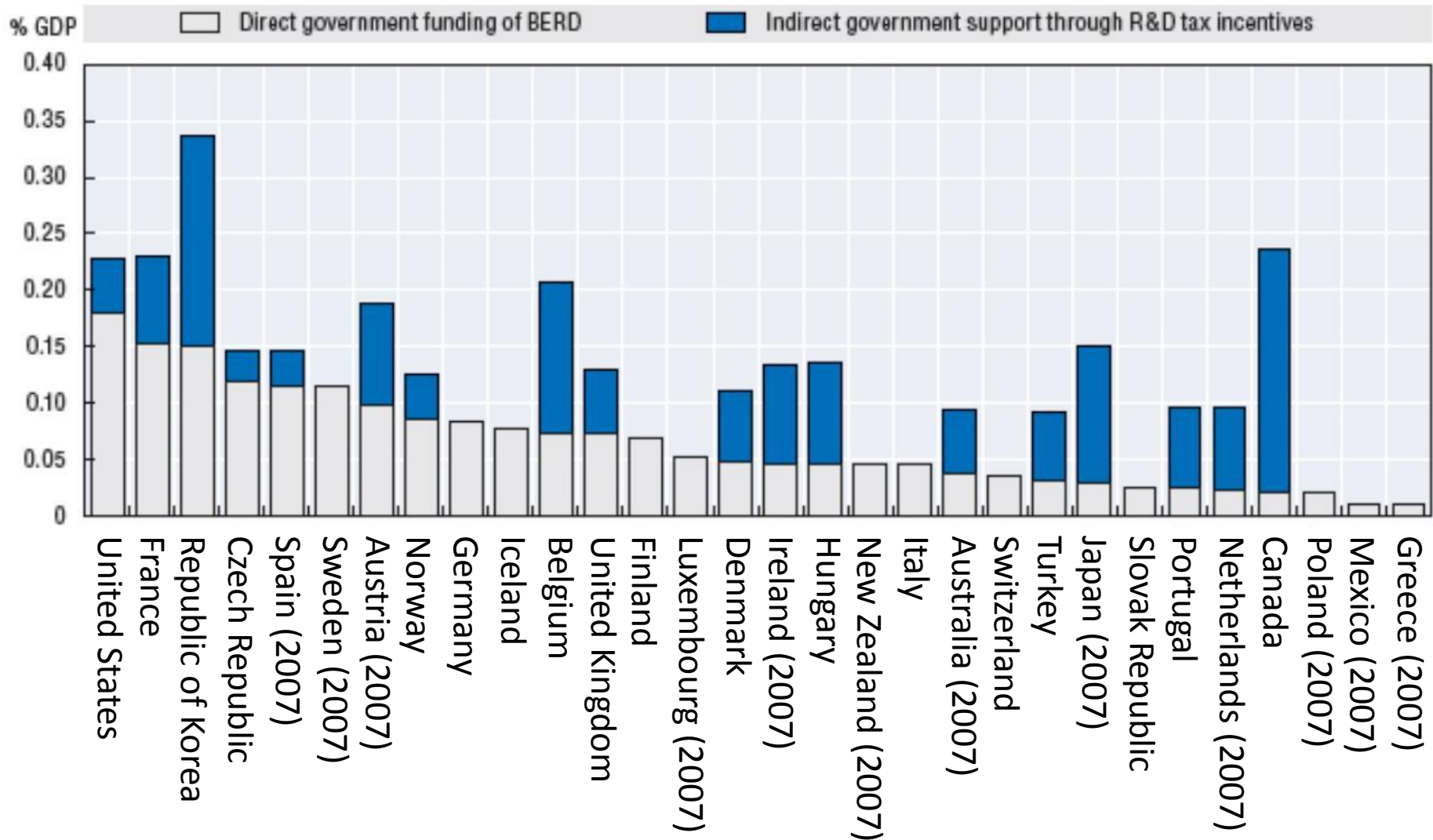
Low investment in innovation in developing countries

- GERD as a proxy for investment in innovation
- GERD low in most developing countries compared to developed countries
- Exceptions: Brazil, China, India, Republic of Korea, Singapore
- GERD by enterprises low compared to developed countries

Direct and indirect instruments for financing innovation

Direct financing: Private	Direct financing: public	Indirect financing
<ul style="list-style-type: none"> -Personal savings, family, friends and partners -Retained earnings -Business Angel finance -Venture capital -Commercial bank loans -Stock exchange -Bonds -Value chain financing -Microloans -Crowdfunding -Innovation prizes 	<ul style="list-style-type: none"> Seed finance schemes Co-investment funds Innovation or technology funds Development banks Innovation prizes International development assistance 	<ul style="list-style-type: none"> Tax incentives (tax credits, allowances, deductions) Public loan guarantees Public R&D spending, business-academic-government R&D partnerships

Direct and indirect government funding of business R&D, 2008



Source: OECD Science, Technology and Industry Outlook 2010

Some examples of success

- Seed finance: Chile, Start-Up programme (2010).
- Seed finance, angels and VC: Brazil, INOVAR programme (2000).
- Innovation funds: Mexico Programme of Incentives for Innovation (PPI) (2009), Mexico National Council of Science and Technology; Peru Science and Technology Programme (FINCYT) (2007); Peru Innovation for Competitiveness Project (2012).
- R&D grants: USA, Small Business Innovation Research (SBIR) program.

Conclusions and suggested issues

- Understanding and adapting to firms needs and capabilities is key. Capacity-building for managers and beneficiaries of innovation financing programmes needed.
 - How to identify critical financing gaps?
 - What are the key capabilities and skills that are critical for sustainable programme impact?
- Indicators to link innovation investments and outcomes
 - What can be learned from the experience of developing countries that have put in place general and/or specialized innovation funding programmes?
- Link to national development strategies and address systemic issues in coordination.
 - How to improve the visibility of innovation support in national and international development agendas?
 - How to strengthen synergies between investment in innovation and in other critical development priorities