Investing in Innovation for Development
Background Note

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The views expressed are those of the author and do not necessarily reflect the views of UNCTAD.
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Background note for the Commission on Investment, Enterprise and Development

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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

Diagram showing the development stages of a business and the corresponding financial instruments, including:
- Public stock markets
- Debt / Bridge loans
- Venture capital funds
- Business angels
- Feasibility grants
- Founder, 3Ps
- Seed
- Start-up
- Early growth
- Expansion
- "Valley of death"

Development stage
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
<table>
<thead>
<tr>
<th>Direct financing: Private</th>
<th>Direct financing: public</th>
<th>Indirect financing</th>
</tr>
</thead>
<tbody>
<tr>
<td>Personal savings, family, friends and partners</td>
<td>Seed finance schemes</td>
<td>Tax incentives (tax credits, allowances, deductions)</td>
</tr>
<tr>
<td>Retained earnings</td>
<td>Co-investment funds</td>
<td>Public loan guarantees</td>
</tr>
<tr>
<td>Business Angel finance</td>
<td>Innovation or technology funds</td>
<td>Public R&amp;D spending, business-academic-government R&amp;D partnerships</td>
</tr>
<tr>
<td>Venture capital</td>
<td>Development banks</td>
<td></td>
</tr>
<tr>
<td>Commercial bank loans</td>
<td>Innovation prizes</td>
<td></td>
</tr>
<tr>
<td>Stock exchange</td>
<td>International development assistance</td>
<td></td>
</tr>
<tr>
<td>Bonds</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
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