



Financing Innovation

Ralph Heinrich

UNECE Economic Cooperation and Integration Division

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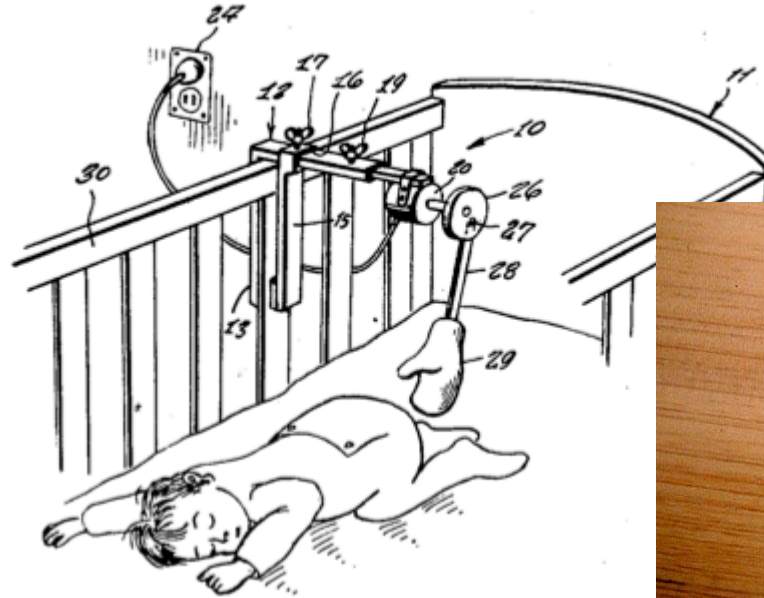
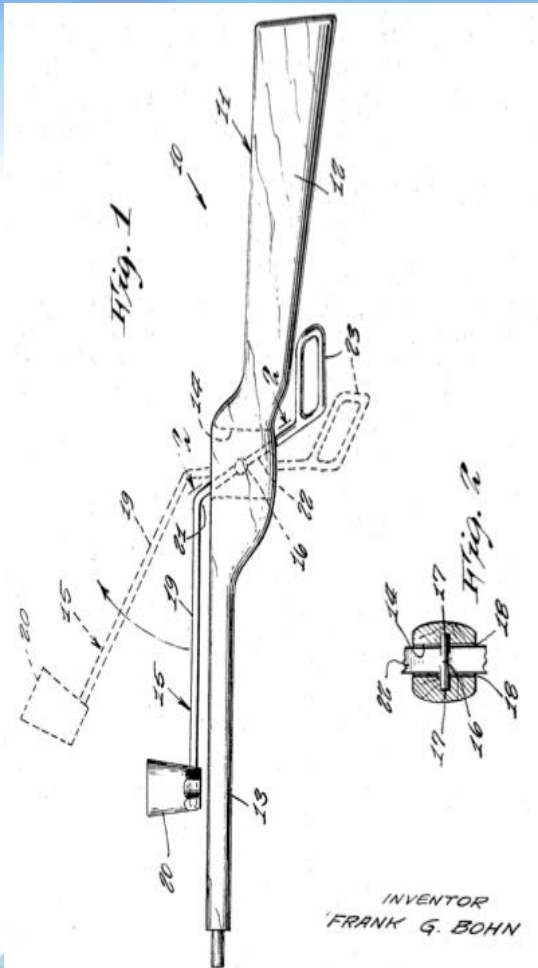




UNITED NATIONS
ECONOMIC COMMISSION
FOR EUROPE



Innovation is more than a bright idea



INVENTOR
FRANK G. BOHN





The Innovation Challenge

- Create demand for innovation
- Invest in human capital
- Invest in academic/basic research
- Nurture an entrepreneurial culture & favorable business environment
- Provide **financing for innovation**





The Valley of Death



Most ventures fail w/in 3 years b/o lack of cash





The Financing Challenge

- Innovation is risky – it fails more often than not
- Innovators often have no track record
- Innovators often have no significant tangible assets
- Innovation often takes time to generate cashflow

ill-suited for traditional bank financing





Financing Sources & Innovation Phases

- Own funds
- Friends, family & fools (3F's)
- Business angels
- Venture capitalists
- Traditional debt & equity

Seed and start-up phase

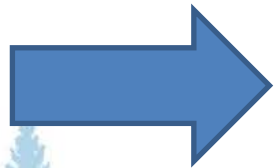
Start-up & early growth phase

Expansion phase



The Chicken & the Egg

- Innovative Entrepreneurs need experienced innovation financiers
- Financiers need deal flow and exit opportunities
- W/o innovative firms, no deal flow, no market, no exit opportunities, no opportunity to gain experience for financiers
- W/o experienced financiers, no innovative firms



Case for Policy
Support





Overview of Policy Instruments

Mode of Intervention	Instruments	Addressees
Direct funding	Feasibility grants	Potential entrepreneurs
	Public venture capital funds	Actual & potential entrepreneurs
Indirect funding	Business development grants/loans/equity	Incubators, technology transfer offices, micro-finance institutions
	Fund-of-funds programs	Private venture capital funds
Credit enhancements	Debt guarantees	Financial institutions, incl. micro-finance
	Equity guarantees	Seed/ early-stage private investors
Tax incentives	Tax rebates, loss deduction, exemption or deferrals of capital gains	Individual/corporate/institutional investors
Technical, infrastructure, knowledge support	Information dissemination	Potential entrepreneurs & investors
	Training/ Knowledge dissemination	Potential entrepreneurs/ incubators/ business angels
	Business services (feasibility studies, business planning, ...)	Potential entrepreneurs





Example of Policy Support for Start-ups: SBIR, United States

The Small Business Innovation Research (SBIR) program, United States

- goal to promote innovative and high-technology small firms
- represents 60% of public SME finance programs in the US
- companies such as Apple, Compaq, and Intel have received SBIR funding
- Most of the founders of the companies receiving SBIR awards came from universities.
- Without the SBIR award, 20% of the founders would not have started their firm and 40% would not have continued it.
- The SBIR programme provides up to \$850,000 in early-stage R&D funding directly to small technology companies (or individual entrepreneurs who form a company) in two phases.
- Phase I awards \$100,000 for up to 6 months intended for project feasibility study. With positive feasibility results, companies can apply for Phase II funding.
- Phase II awards \$750,000 for project and prototype development. This phase lasts up to 2 years. It is expected that beyond Phase II, the SBIR recipients launch commercialization efforts with external, private funding, often provided by VC funds.
- One of the major strengths of the programme and a key factor for its success is the decentralisation of the funding decisions, spread around 11 federal agencies. Each agency allocates 4% of its funds to small innovative firms.

<http://www.sbir.gov/>





Example of Policy Support for Early-stage Companies: PreSeed, Finland

- Managed by SITRA, the Finnish Innovation Fund
- launched in 2001 to help people with good business ideas to find sources of venture capital
- 3 components:
- pre-seed funding for the development of technology-oriented ideas (LIKSA)
- a marketplace (INTRO), serving private investors and businesses that are seeking initial investment through company presentation forums, focused investment negotiations and a Web service
- an expertise exchange (DILLI), helping entrepreneurs access needed expertise from experienced business professional prepared to share the risk of the venture as well as helping business experts exchange their know-how for a share in the company.

<http://www.sitra.fi/en/Programmes/CompletedProgrammes/innovation/preseed/preseed.htm>





Example of Policy Support for University-Industry Cooperation: EXIST, Germany

- to improve the entrepreneurial climate at higher educational institutions
- and to increase the number of start-ups from these institutions
- regions designated as EXIST partners, encompassing extensive networks of educational, research, economic, and political institutions
- to motivate, develop, and support entrepreneurship,
- by offering financial and professional support for students, graduates or researchers at the universities to develop business ideas





Example of Policy Support for Business Angels: EIS, United Kingdom

The Enterprise Investment Scheme

- helps certain types of small higher-risk unquoted trading companies to raise capital
- provides income and capital gain tax reliefs for investors in qualifying shares of such companies as follows:
 - Income tax rebate equal to 20% of investments up to £400,000.
 - Exemption from capital gains tax on Angel investments
 - Income tax relief of 40% on failed investments
 - Deferral of tax on capital gains if these are reinvested in EIS companies.

<http://www.eisa.org.uk/render.aspx?siteID>





Example of Policy Support for Corporate Venturing: SIVA, Norway

- The Industrial Development Corporation of Norway (SIVA) established the Industry Incubators program in 2004
- incubators are linked to a well established manufacturing company or a group of companies («the mother company»)
- mother companies offer physical premises and assistance to individuals willing to start up a relevant business
- incubators identify and support new business opportunities as well as people who are interested in them and are capable of developing them
- incubators are organized as private limited companies owned by the mother companies, other local investors and SIVA.

<http://www.siva.no/sivabas/nyheter.nsf/main/B75688BC7187E9F3C1257214003648F3?opendocument>





For more information

www.unece.org/ceci/welcome.html

Ralph.heinrich@unece.org

T: +41 22 917 1269

Skype: ralph.heinrich4

