Financing innovation in small businesses and start-up firms: policy issues

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Structure course

- Introduction
- The nature and financing of innovative enterprises
- From ideas to start-ups: the role of public initiatives
- Business angels and early-stage financing
- Early-stage growth: venture capital and other financial intermediaries
- Financial development and public financial markets
- Design, implementation and evaluation of early-stage policies
- Recapitulation and conclusions

Module 1

The Nature and Financing of Innovative Enterprises

Module 1. Objectives

- The nature and characteristics of innovative enterprises
- The development and financing needs of innovative enterprises
- The financing options for innovative enterprises
- The conditions for a self-sustaining system for innovation finance

Some key questions

- What is innovation?
- Why is it important?
- What are innovative enterprises?
- What determines their prevalence?
- How do they develop?

What is innovation?

- Introduction to the market of:
  - New products or services
  - New business models that enhance the value of existing products or services
- Disrupts existing market processes
  - Incremental (small-scale improvements)
  - Radical – new ways of doing business

Why does innovation matter?

- Engine of economic growth and development
  - Creation of new industries
  - Boosting of business productivity
- Major factor for growth creation
  - Facilitates the creation of new enterprises
  - Spurs high growth

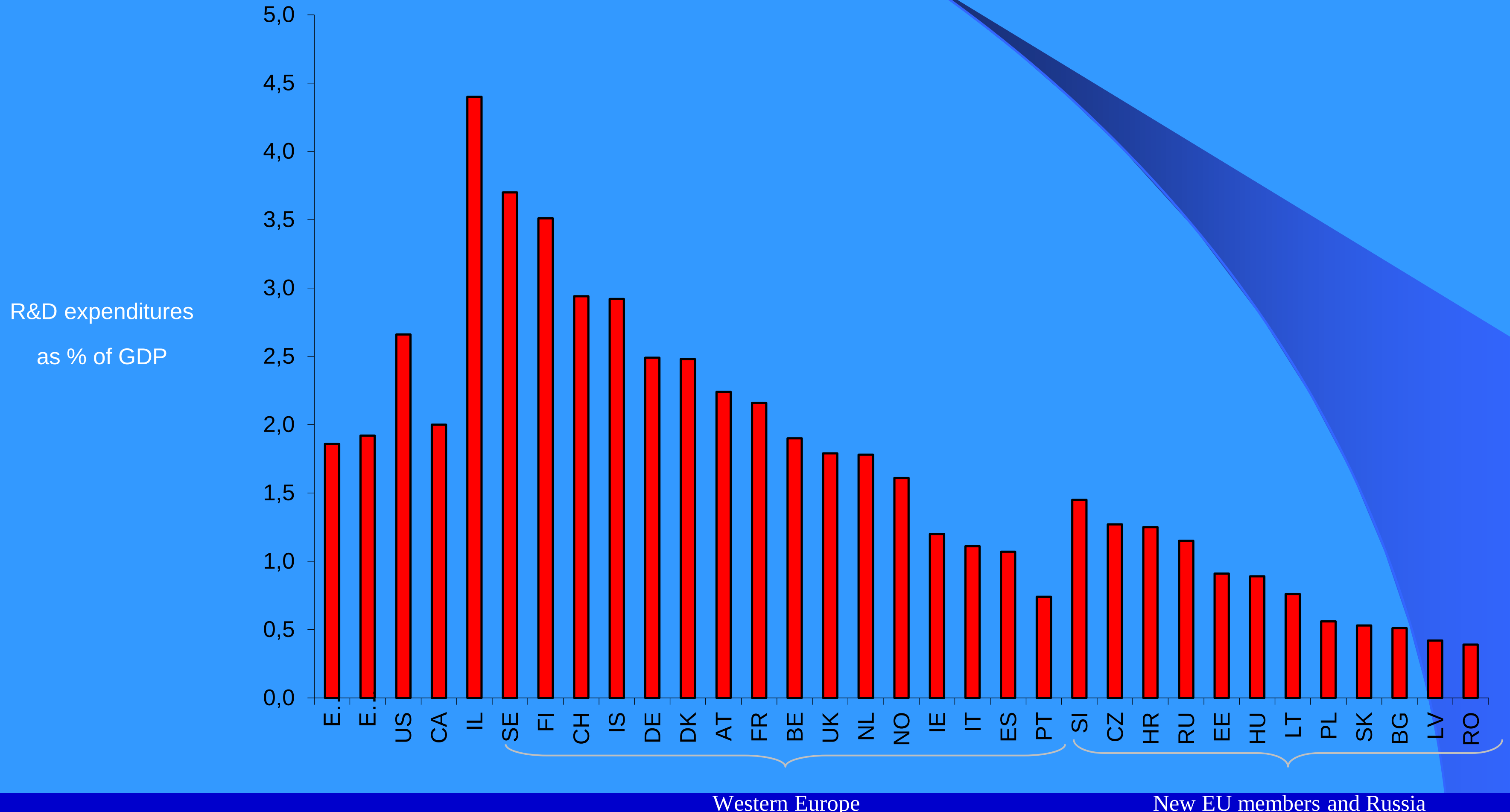
What are innovative enterprises?

- Primarily engaged in innovation
  - Tend to be new or younger
  - Can grow substantially
  - Account for almost all radical innovations
- Opportunities to exploit
  - Market applications for new inventions or technological discoveries
  - New applications for existing technologies
  - Replication of business practices in new geographical locations

What determines their prevalence?

- Overall R&D environment
  - R&D intensity
  - Innovation leaders, followers, catching-up,
- Attractiveness of entrepreneurship as a career
  - Attitudes and aspirations towards risk and growth
  - Workforce mobility
- Favorable ecology of seed financing and support

R&D intensity across countries

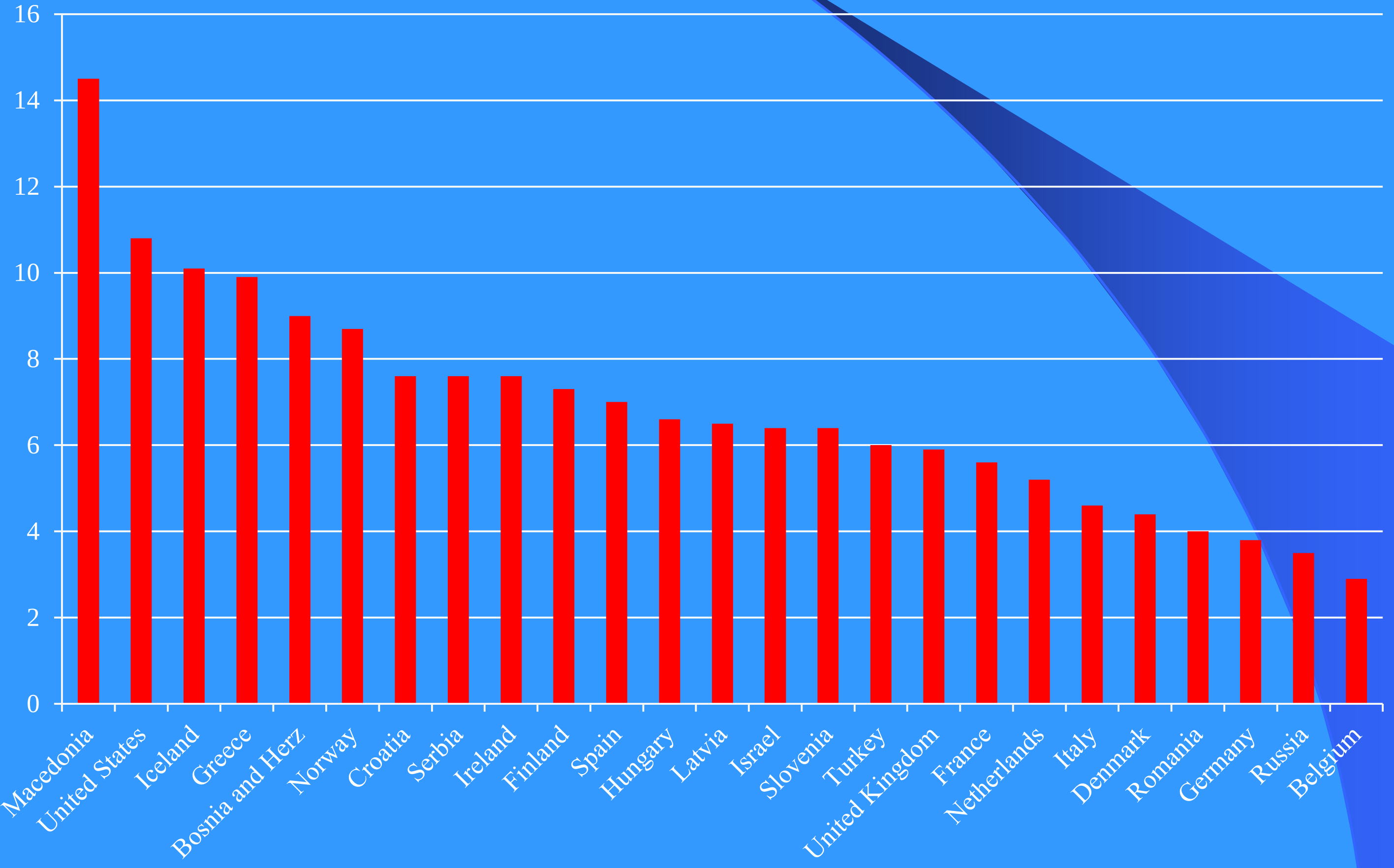


Source: Eurostat, OECD

Early-stage entrepreneurial activity

Prevalence rate (%) among adults

aged 18-64



Source: Global Entrepreneurship Monitor (2008)

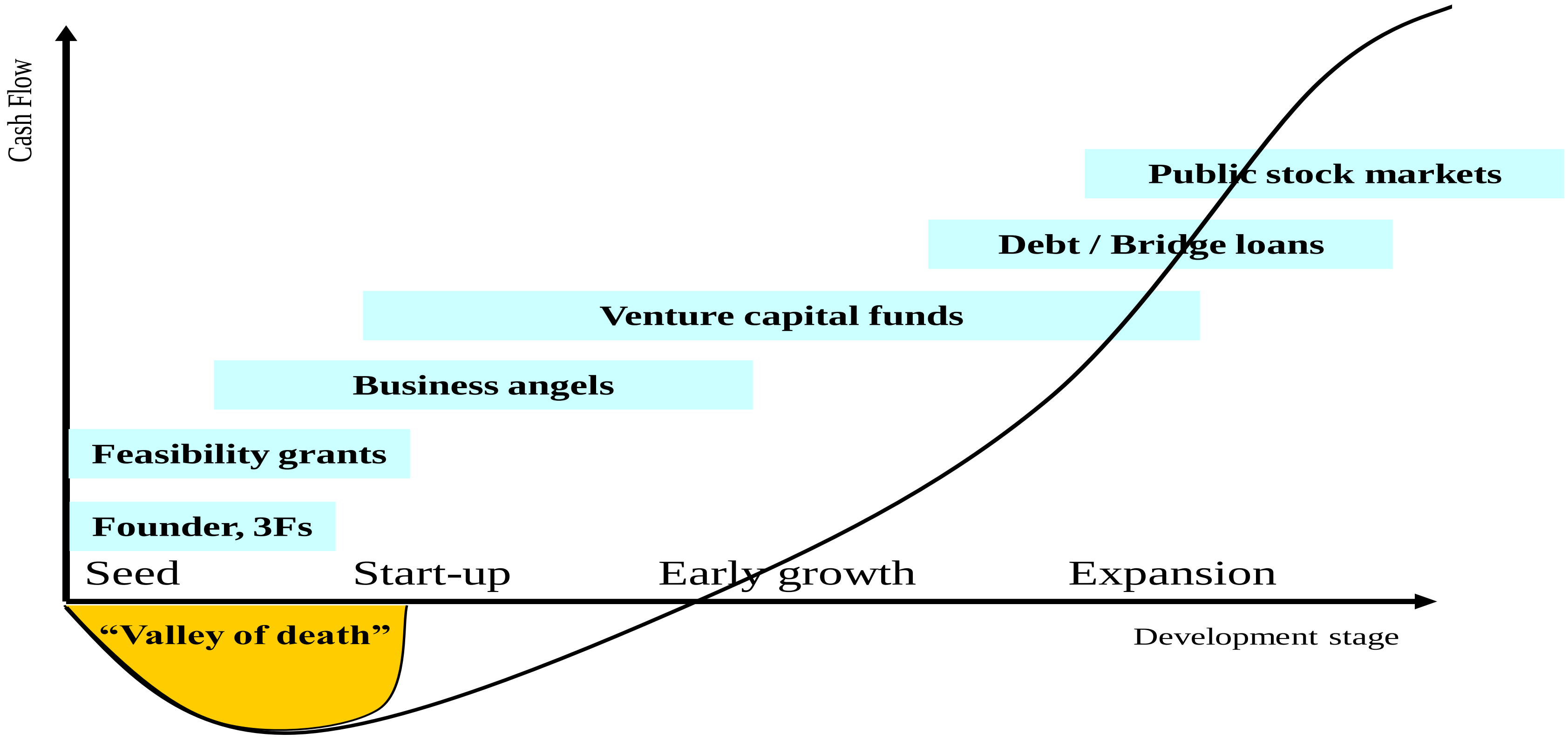
Development of innovative enterprises

- It starts with an individual (group) idea
- Exploration of technical feasibility, market potential, and economic viability
- Product development
- Start-up of operations; market introduction
- Market and organizational expansion

Financing needs

- Seed stage – initial R&D, business concept refinement, feasibility analysis
- Start-up stage – prototype development, market research and outreach, formal organization.
- Early-growth – small-scale commercialization, platform for scalability
- Expansion – substantial growth in scale and market impact.

The J-curve for innovative enterprises



The challenges for mainstream finance

- High uncertainty
  - No track record, no collateral
  - Limited evidence for feasibility and viability
  - Possible high-rates of obsolescence
- Information asymmetry
  - The entrepreneur's knowledge is tacit
  - Hard to distinguish high- and low-quality opportunities
- Value is entirely based on long-term growth potential

Suitable financing conditions

- Ability to "seed" a large number of enterprises- EXPLORATION
- No guaranteed repayment - RISK
- Additional resources allocated to those that show potential -REWARD

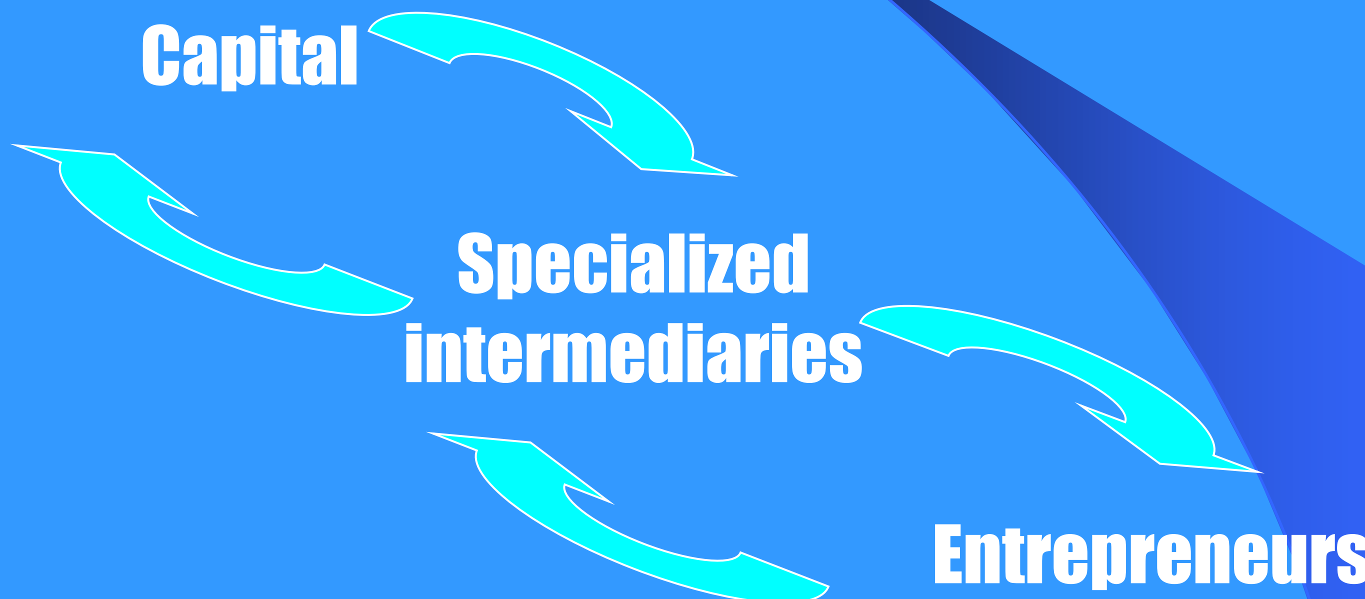
Merit-based awards (grants)

- Often provided by public agencies
- Unconditional allocation of funds (based on meeting pre-specified criteria)
- Substantial administrative and decision burden
  - Decentralization can be optimal

External equity

- Match between risk profile and potential payoffs
- Investors have claims on the residual value of the enterprise (i.e. they share the upside)
- Investors also share the downside (i.e. they can lose their money entirely)
- Various mechanisms ensure that they get paid before the entrepreneurs do (e.g. convertible preferred stock)
- Examples: business angels, venture capital funds

Framework conditions



Demand side interventions

- Financing may not be the key constraint
- Complementary focus on creating **opportunities** – an important factor in the development of VC financing
- Coordinated use of **demand and supply** policies

Investment readiness

- Beyond general factors influencing entrepreneurial activity
- Focus on making firms more attractive to potential investors
- Bridging the "information gap"
- "Investment readiness" programmes have proliferated - but tailored advice is costly.