

**National diversification strategies and
knowledge-based development: some
financing issues in CIS countries**

José Palacín

Economic Cooperation and Integration Division

UNECE

Structure presentation

- Financial development, diversification and innovation
- Innovation and specialised financial intermediaries
- The role of public policy
- Some experiences in the CIS

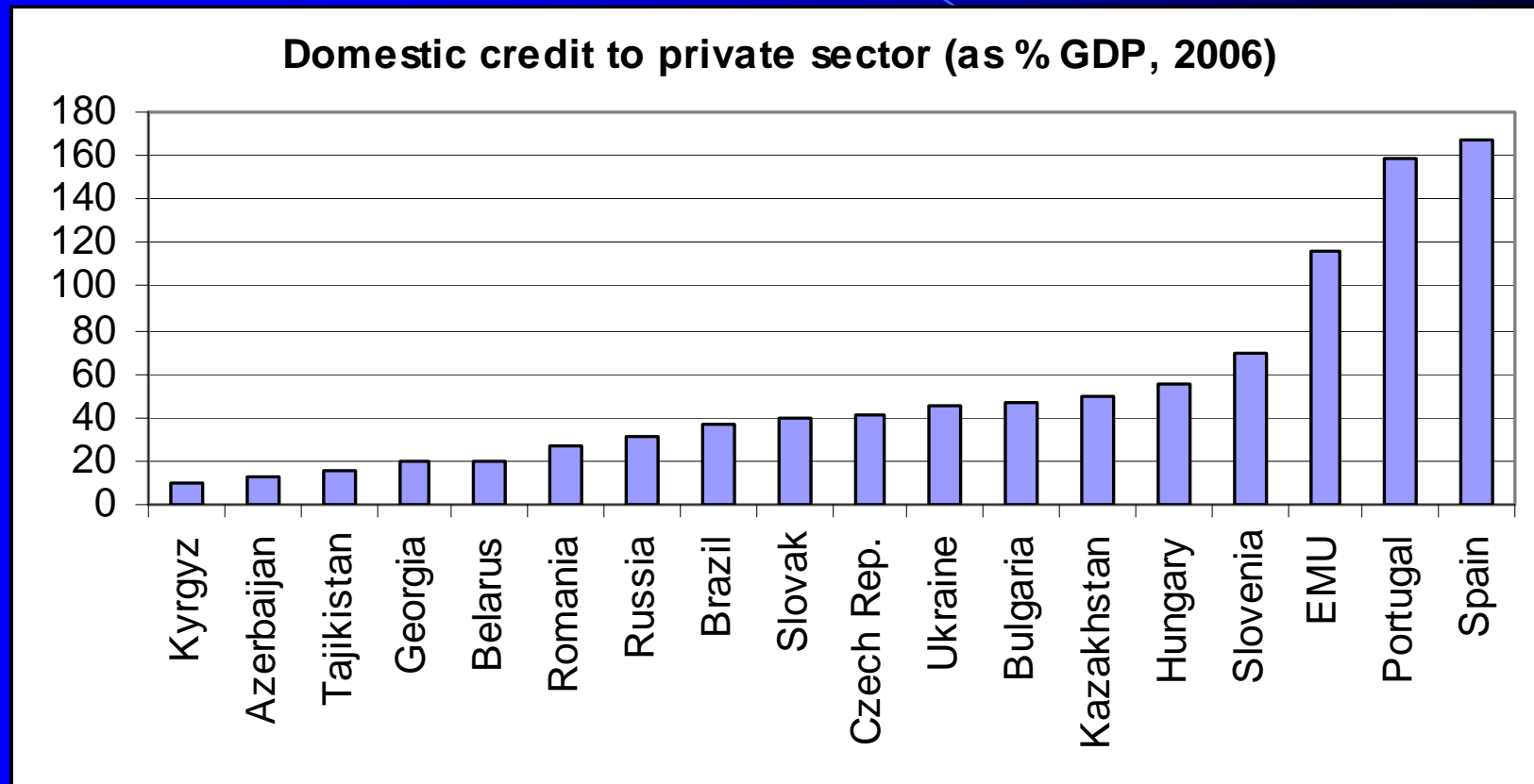
Financial development and diversification

- New firms depend more on external finance than existing firms.
- Well-developed financial systems ease external financing constraints that impede firm and industrial expansion.
- Sectors that depend on external finance because of technological reasons, grow faster in more developed financial countries.
- Higher levels of financial development are associated with faster adoption of new technologies and capital reallocation among sectors

Financial development and innovation

- Knowledge-based development, which relies on intangible assets, requires a more developed financial system.
- Financial development favours innovation as it improves the prospects of young firms.

Financial development



Source: World Development Indicators, World Bank

Financial development: some key factors

- Corporate governance and minority shareholder rights.
- Importance of efficient legal systems (speed in the solution of conflicts, impartiality, consistency)

Inter-temporal nature of financial contracts.

Diversification and financial development

Economic concentration raises challenges:

- Sectoral risks in the banking sector that are difficult to diversify
- Off-shore banking by large, cash-rich corporations with exports earnings retards domestic financial development

Economic diversification leads to financial development (two way relationship)

Financial development promotes diversification and innovation.

BUT..

- What are the specific needs of innovative companies – particularly in high-tech sectors?
- Can traditional financial intermediaries address them?
- What is the role of public policy?

The case for equity

Bank lending does not fit well with:

- Uncertain and unpredictable cash flows
- Lack of tangible collateral
- Large information gaps and extreme uncertainty

Research intensity and leverage appear negatively correlated.

Specialised financial intermediaries

- Business Angels (informal VC)
- Venture capital (formal VC, a subset of private equity)

VC as a way to overcome barriers to innovation in large corporations and financing by traditional intermediaries

The case for public intervention

- R&D underprovided in a competitive market
- Gap between private return and cost of capital
- Increasing returns in the development of VC industry

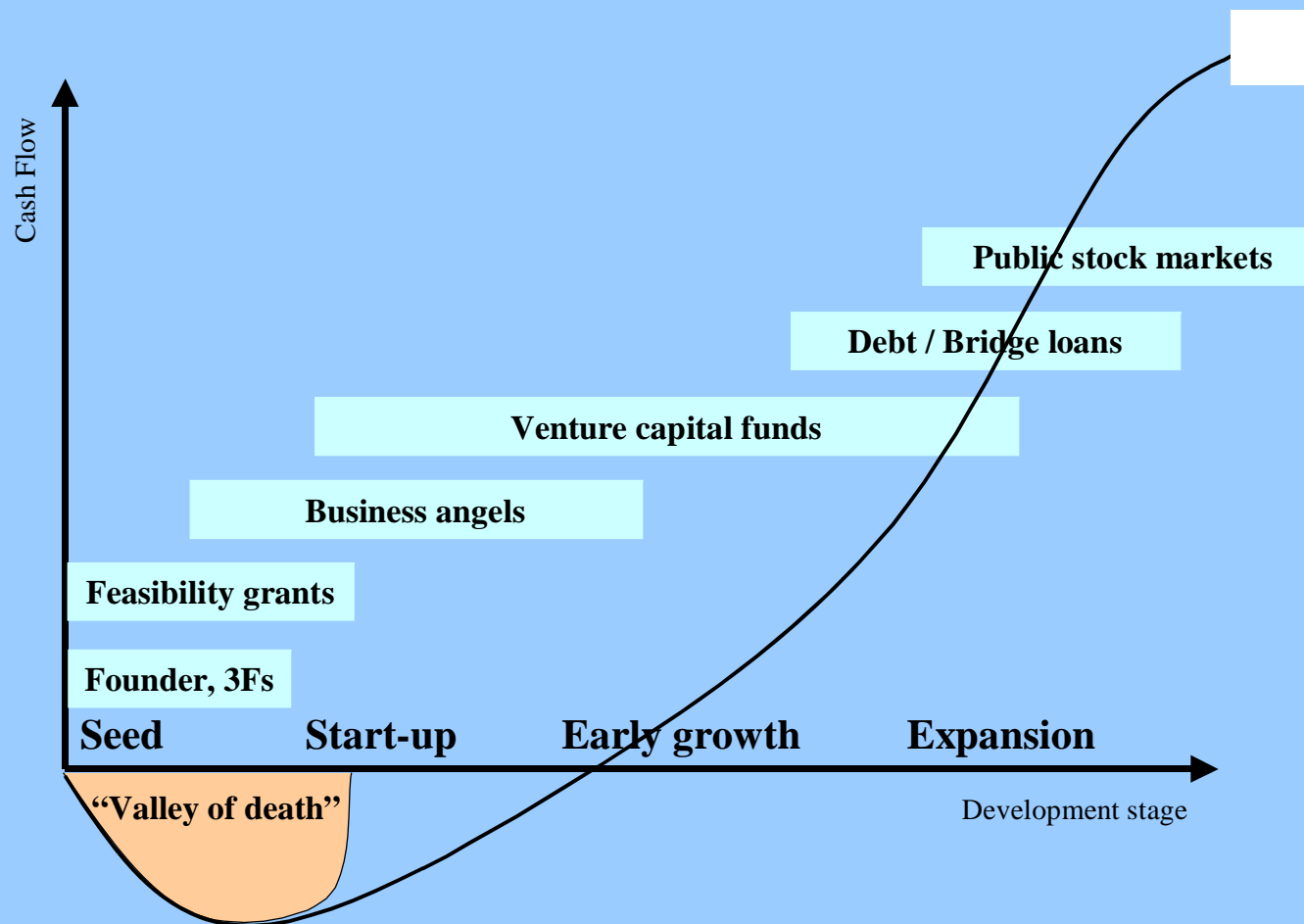
Market failures justify government intervention but the design of policies needs to avoid government failures through the creation of a proper system of incentives.

Development stages and financing cycles

Two frameworks to consider when designing interventions:

- Development stages of a company – and impact on financing needs
- Venture capital cycle- and identification of issues that need to be addressed

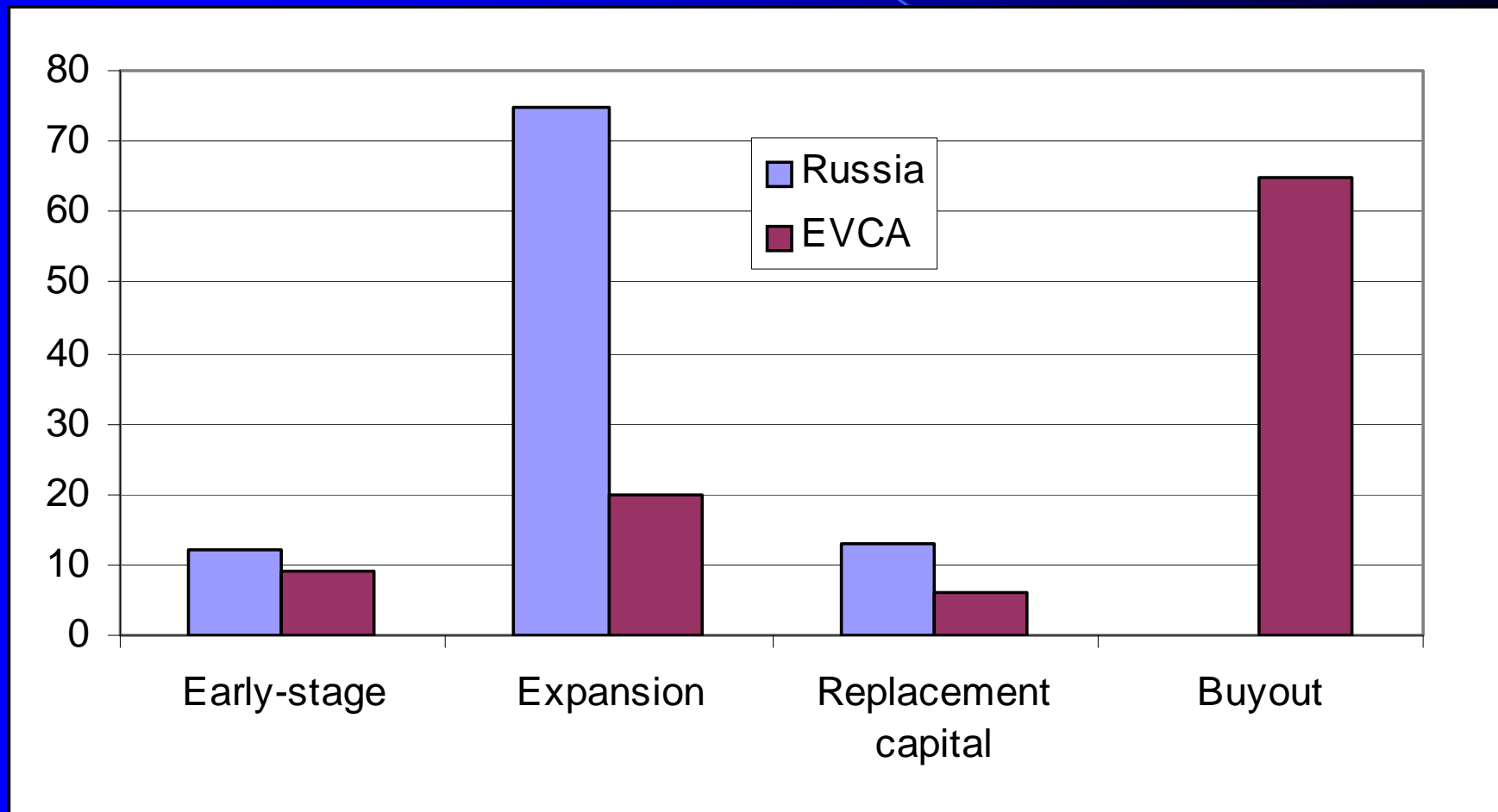
Development stages and sources of finance



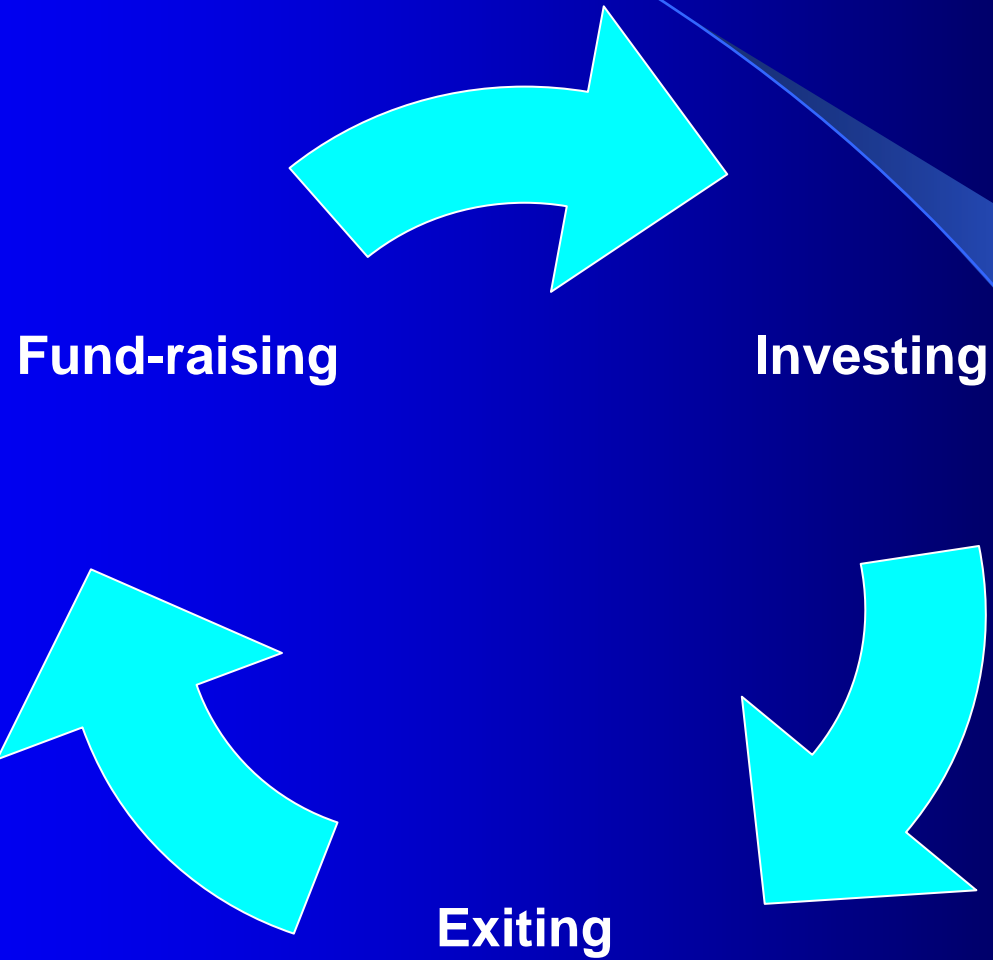
Early-stage funding

- Public grants
 - Business angels
 - VC is little inclined to engage in early-stage funding where risks are higher and deals smaller
- ... however the share of early stage funding in total VC funding is higher in Russia than in Europe

Private equity: stage distribution as % of total, 2006



Venture capital cycle



Deal flow

Issues in transition economies:

- entrepreneurship
- low R&D
- dominance of public R&D in total R&D financing
- poor links between publicly-funded R&D and industry

Creating deal flow

- VC needs a deal flow to operate but..
- It does not provide an answer to the market failure on early stage financing.
- Financing pre-commercialization activities that can be then followed on by VC.

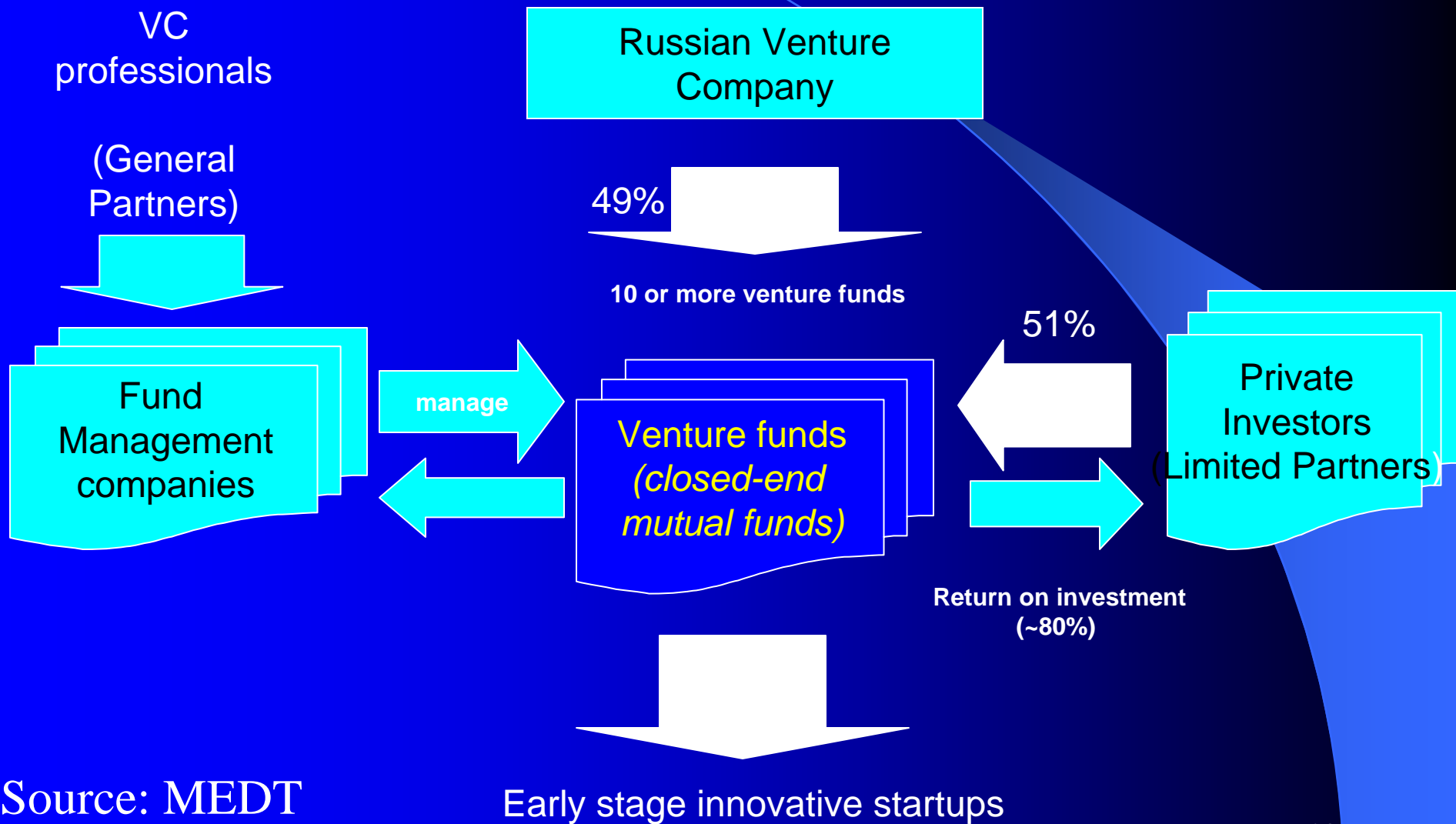
Russia- the FASIE experience



Foundation for Assistance to Small Innovative Enterprises

- budget equal to 1.5% of spending on science
- Start programme (launched in 2004)
- two-stage mechanism of grant financing.
 - a prototype is developed, tested and patented and a business plan is drawn.
 - graduation to the second stage requires finding an external investor.

Russian Venture Company



Source: MEDT

Kazakhstan

National Innovation Fund

Национальный
Инновационный
Фонд



- Five public-private funds
- Investments abroad – to develop skills
- Direct financing of R&D projects

Bottlenecks

- Lack of deal flow – projects that can be funded by VC
- Policy initiatives have focussed so far to a larger extent in the supply of capital at later stages of the financing cycle
 - FASIE: Valuable but small
 - RVK – mandate extended to include seed and pre-seed financing

International comparisons

Objectives similar to the successful Yozma programme:

- Help the VC industry to achieve a critical mass
- Acquire a network of international contacts
- Learn from international experience

But:

Is there a **supply of entrepreneurs** coming from an existing industry?

How **R&D/early-stage support programmes** can create the necessary deal flow?

Investing

- Opportunities
- Skills
- Legal system

Exit

- Ultimate aim of VC – realisation of profit, recycling of capital for new investments.
- A well developed stock market favours VC financing but..
- Importance of the globalization of capital markets – exit possibilities.



Specialised stock markets

Sector for Innovation and Growth

Companies - (a segment of MICEX):

- Created with the support of MITC
- Target: facilitate IPOs of innovative companies and development venture financing
- Easier listing requirements...but additional demands for investors' rights protection

Simultaneity problem

Public policies can support VC development through:

- Institutional and legal development
- Identifying and correcting bottlenecks in the financing cycle, through grants or public-private co-financing.

A functioning VC market requires:

- Entrepreneurs
- Specialized financial intermediaries
- Capital -Investors with a taste for risk

VC activity: a symptom?

- Why there is little venture capital activity?
It is not clear whether, this is caused by
 - Lack of attractive opportunities
 - Insufficient supply of risk capital
 - Little demand by entrepreneurs
 - Shortage of exit options.

Corporate venture capital

- An alternative/complement to informal and formal VC?
- The development of VC in EM faces many challenges.
- Collaboration between start-ups and MNC/large local companies.

Some final thoughts

- Supply-side policies only are ineffective:
 - Institutional and skill development
 - Demand aspects
- VC cannot be the central component of a policy aiming to foster high-tech industry.
- Mix of policies, importance of background conditions
- Emphasis not only on resources but on institutions and incentives

Thank you!
Jose.palacin@unece.org