

# **National Innovation Systems and Innovation Governance in Transition: Lessons Learned from 5 Reviews**

**Presentation by Rumen Dobrinsky**

*European Alliance for Innovation*

**International Conference**

**“Better Policies for More Innovation”**

Minsk, 17-18 November 2015

**Methodological approach:  
National Innovation  
Systems**

# What is Innovation?

- **Innovation is a very broad concept:**
  - Product innovation; process innovation; marketing innovation and organisational innovation
- **But innovation is always associated with the successful commercial application of knowledge:**
  - Bringing ideas to the market in the form of new products and services
  - New business models that enhance the value of existing products or services

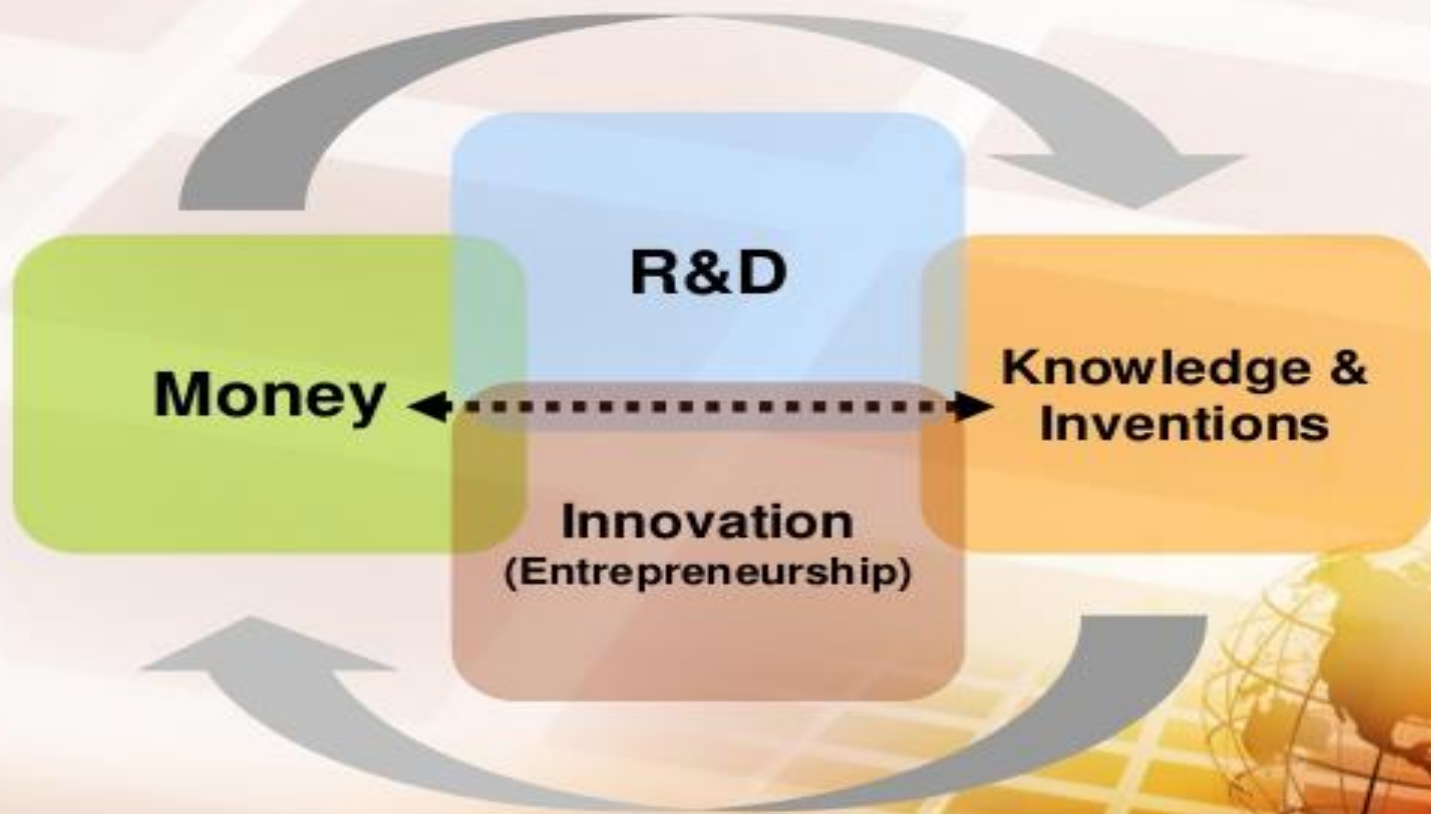
# Innovation is about making money

**“Whereas R&D focuses on transforming money into knowledge  
Innovation is about transforming knowledge into money”**

*Esko Aho, Former Prime Minister of Finland*

# The innovation cycle

**STI: Transforming Money into Knowledge and Vice Versa**



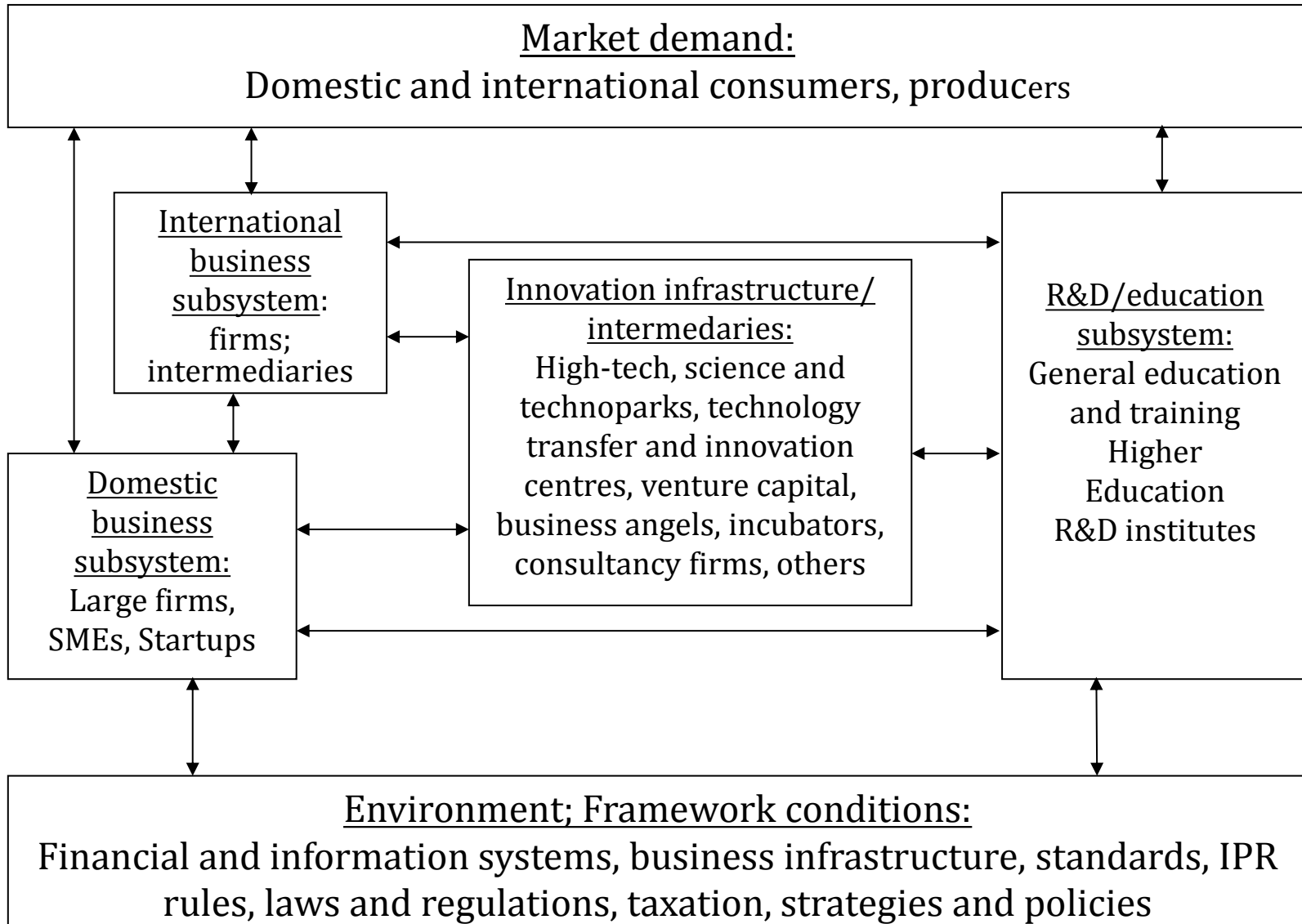
# Innovation in the modern economy

- Innovation is a highly **complex phenomenon**
- Requires a combination of **different types of knowledge**: pre-existing in companies; resulting from new R&D; generated through networking; supplied by markets or users; borrowed from competitors
- Involves the **interactions of many “actors” (stakeholders)**: academic and R&D institutions, firms, public bodies, financiers, users, etc.
- Innovation is a process with **highly uncertain outcomes**: therefore there is a need to commit resources to reduce uncertainty

# The National Innovation System (NIS)

- **NIS:** the network of institutions in the public and private sectors whose activities and interactions initiate and diffuse new technologies and products
- **NIS agents:** knowledge institutions (universities, research institutes, technology-providing firms), firms and government bodies
- The **interactions and linkages** between the elements of the NIS are also part of the system
- The **flows of ideas and knowledge**, as well as **the ability to learn** are also part of the NIS

# The NIS of a small open economy





# Innovation Governance

- Refers to the efforts by various innovation stakeholders aiming to manage and guide the innovation process
- Includes the **decision-making rules** and **interactions** between innovation stakeholders taking such decisions
- Includes both **public sector** (competent government bodies) and **private sector actors** (businesses, financial institutions, innovation intermediaries, etc.)
- Its **formal component** covers the existing legislation, regulations and other policy decisions referring to the innovation process
- Its **informal or behavioural component** is related to the incentives and motivation of NIS stakeholders/actors

# **Key Findings and Lessons from 5 Innovation Performance Reviews**

# Strengths and driving forces

- Innovation is a declared policy priority at the highest level of national strategy and policy
- This is reflected in comprehensive legislative, programmatic and regulatory documents
- All countries have made good (albeit varying) progress in establishing some main building blocks of their NIS
- There exist a range of policy instruments supporting R&D and innovation
- Relatively well developed education system

# Common misconceptions

- **Narrow understanding of innovation as frontier, technological innovation**
  - This is not just a terminological misconception; it has wide ranging implications for innovation policy, its institutions and policy instruments
  - The result is a truncated and suboptimal NIS, narrow policy mix and supporting instruments;
  - Plus, a range of innovation-related activities are left out of the scope and coverage of the existing policy instruments
  - This reduces the overall effectiveness of the policy efforts and the efficiency of the innovation process
  - This has been the picture in all 5 countries and little seems to have shifted or changed in this regard

# The systemic approach is weak or missing

- While declared innovation policy is usually based on the NIS concept, the systemic approach is often missing in policy practice
  - The most obvious piece of evidence is the absence of policy instruments stimulating and supporting connectivity within the NIS and collaboration in the innovation process
  - Another piece of evidence is the lack (or insufficient number) of institutions supporting connectivity and collaboration
  - This is reflected in the state of the NIS and the innovation governance system and, ultimately, reduces significantly the efficiency of the innovation process

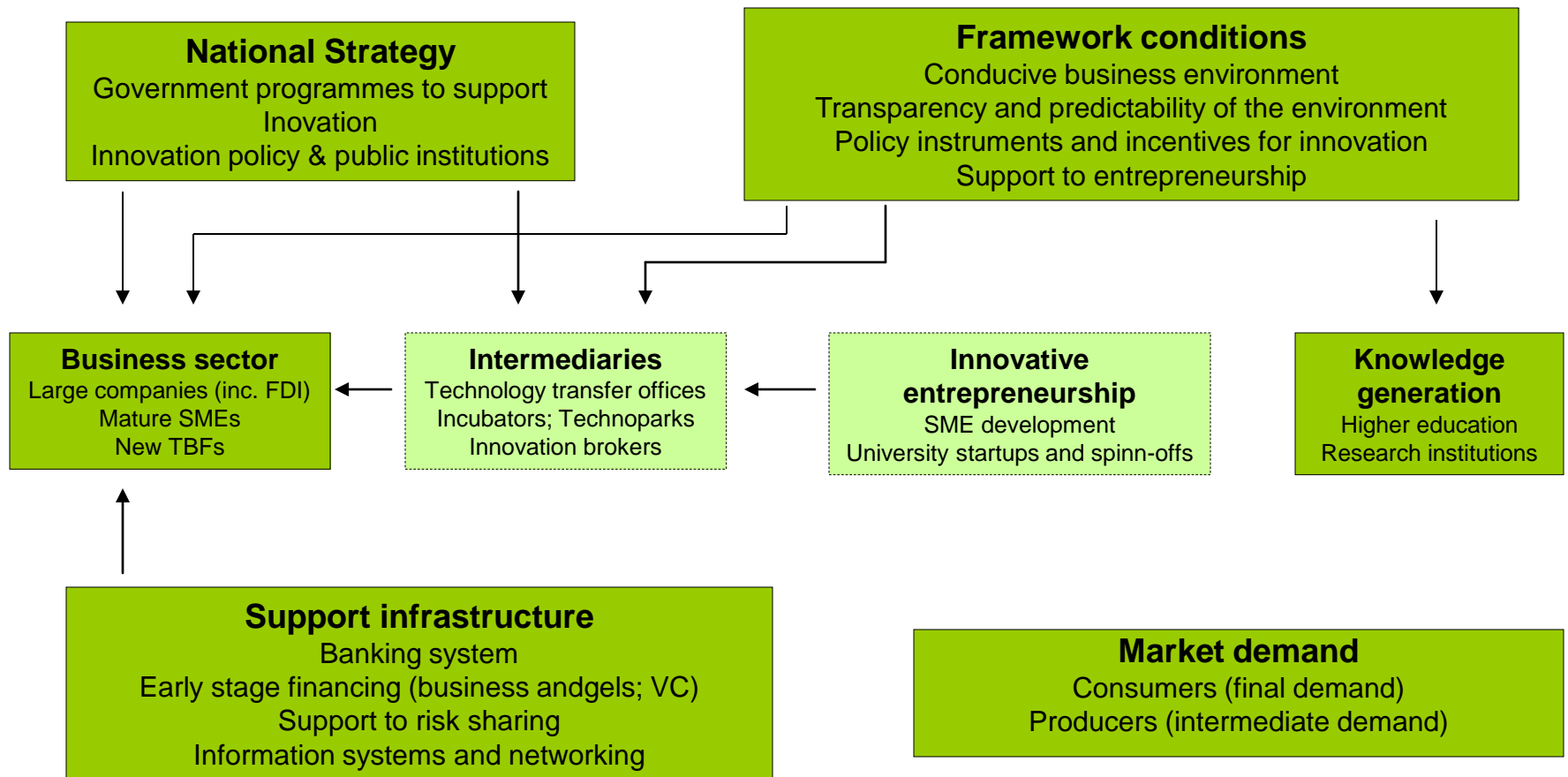
# Innovation Systems are underdeveloped!

- **This is largely a consequence of the two main flaws discussed above:**
  - Narrow de facto interpretation of innovation in policy practice
  - Weak de facto interpretation of the systemic policy approach
- **In all 5 countries: the NIS that we observe today still need considerable efforts to become fully fledged and efficient**

# Underdeveloped NIS (contd.)

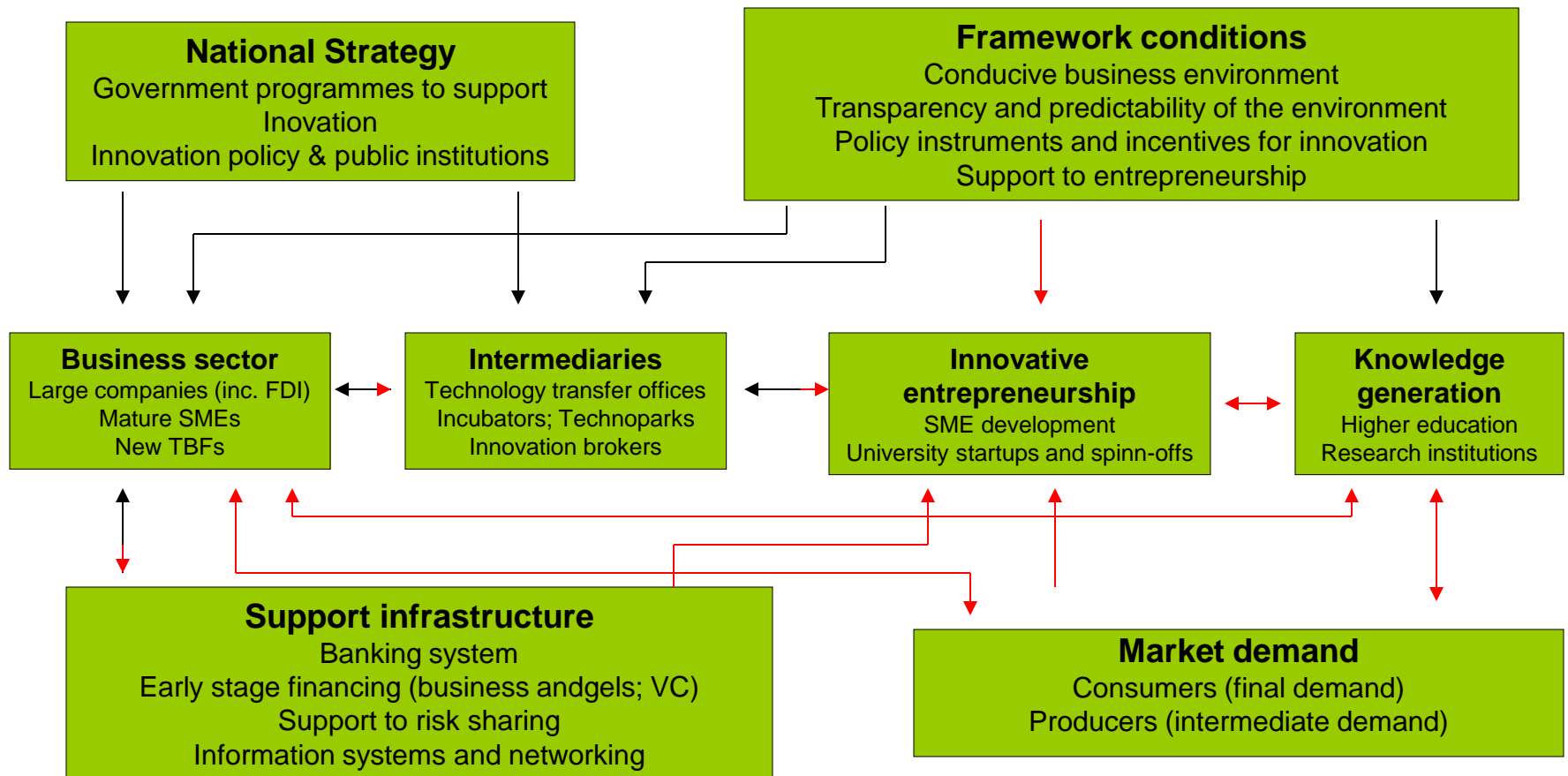
- Many important NIS building blocks of mature market economies are either still weak or non-existent
- Weak/non-existing innovation intermediaries
- Weak connectivity; weak or non-existent linkages among innovation stakeholders
- The most obvious examples are the weak industry-science linkages; the weak support for the commercialization of the results of research
- Absence of, or insufficient sources of innovation finance, especially early stage finance
- Weak support to innovative entrepreneurship (both in terms of policy instruments and support institutions)

# The National Innovation Systems today ...





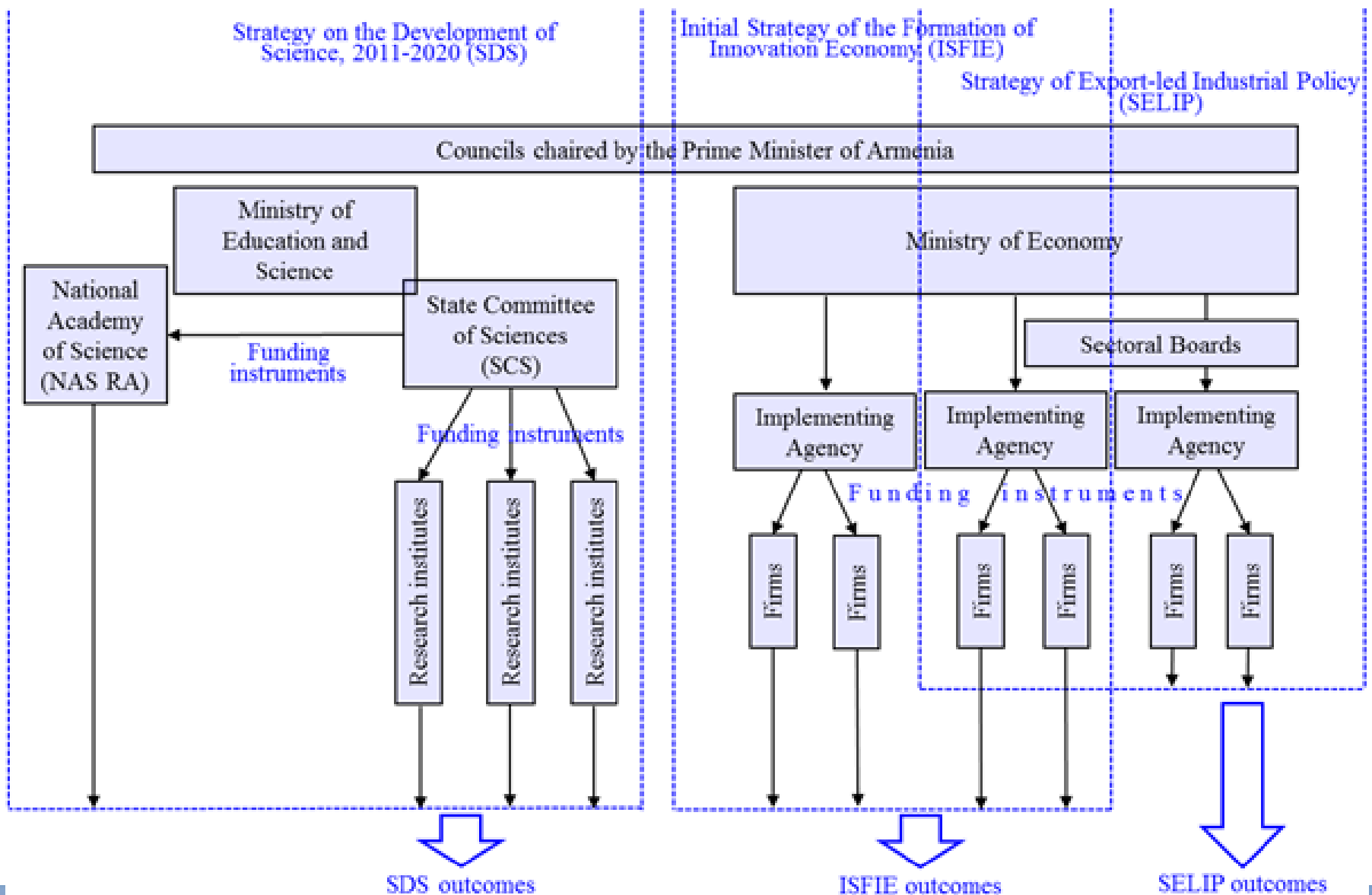
# ...and in the future



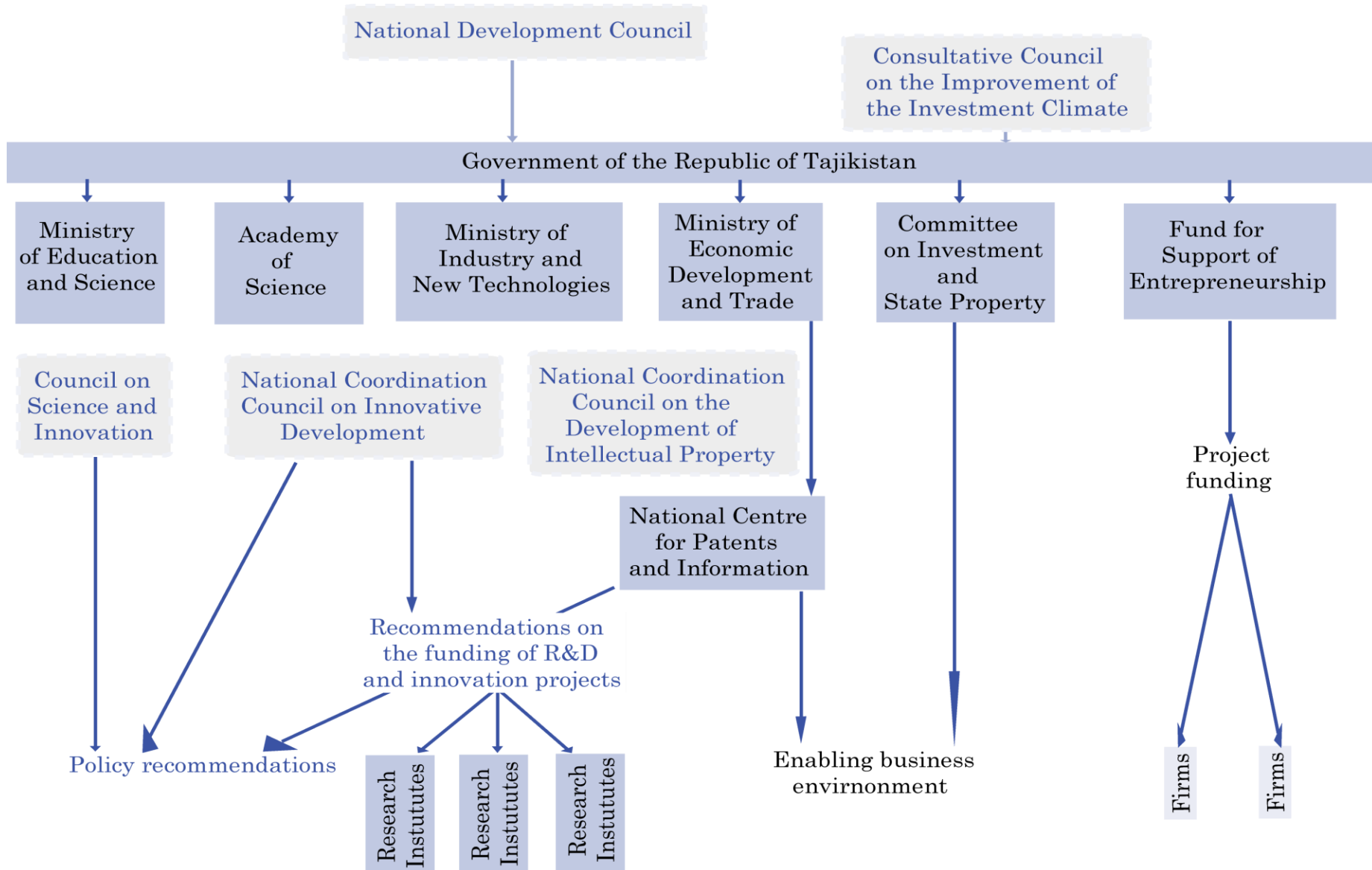
# Innovation governance systems are different!

- **Innovation governance systems are different ...**
- **... But despite the differences, they often display similar weaknesses**
  - Fragmentation: often there are many different bodies tasked with the implementation of different innovation support programmes
  - Poor coordination between innovation governance bodies
  - These are impediments for conducting a coherent national innovation policy and reduce the efficiency of the innovation process

# Innovation Governance System of Armenia



# Innovation Governance System of Tajikistan



# Align policy practice with declared goals!

- **In most cases, the declared policy objectives are correct and well formulated**
- **What breaks is often how these goals and objectives are translated into policy documents, programmes and instruments**
  - Sometimes, this is due to lack of understanding how the innovation system operates and what are the driving forces of innovation
  - Sometimes, this may be due to conflicts with vested interests in the economic systems and subsystems
- **Whatever the reason, for things to move in the right direction, policy practice needs to be aligned with declared goals and objectives!**

**THANK YOU!**

**Thank you!**

**Rumen Dobrinsky**

**E-mail: [rumen.dobrinsky@eai.eu](mailto:rumen.dobrinsky@eai.eu)**

**[rumen.dobrinsky@gmail.com](mailto:rumen.dobrinsky@gmail.com)**