

# New trends in the Hungarian and EU innovation policy

Rita Szabó

Department of Domestic Affairs

Promoting Resource Efficiency in Central and Eastern Europe
Transnational Workshop
Budapest, 13 September 2013



❖ The performance of the Hungarian National Innovation System

❖ The latest developments in the field of the Hungarian and EU RDI policy

The mission of the National Innovation Office (NIH)



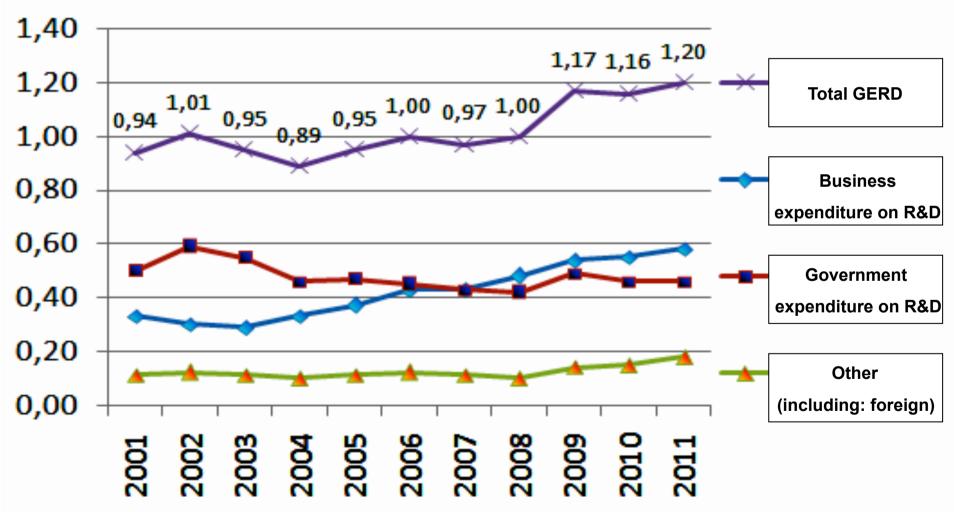
### **Gross domestic expenditure on R&D**

- **❖** Japan
- **\$USA**
- **⇔EU 27**

Source: European Commission - Eurostat; Europe 2020 im p. 13.



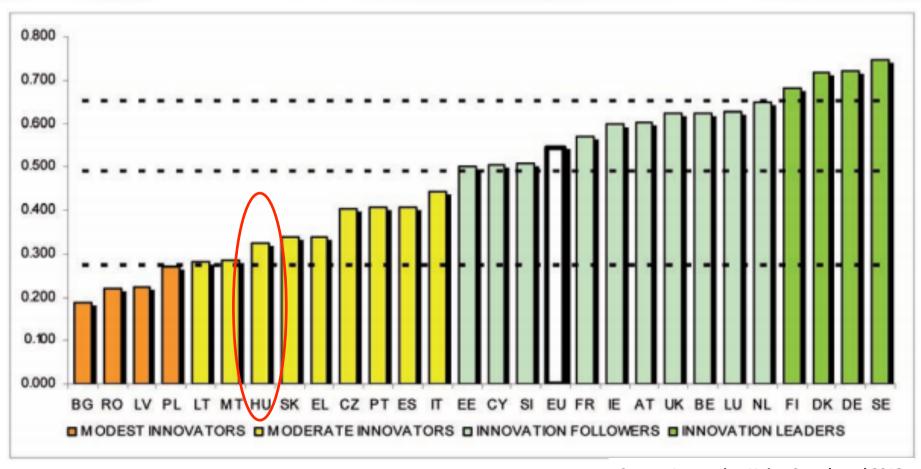
# Gross domestic expenditure on R&D, 2001- 2011 (% share of GDP) - Hungary



Source: Investment in the Future - National Research and Development and Innovation Strategy (2013-2020)



### **Summary Innovation Index (SII)**

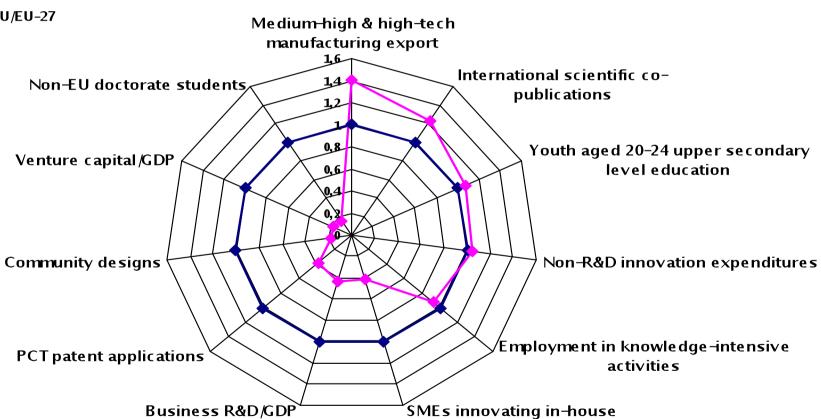


**Source: Innovation Union Scoreboard 2013** 



#### The Hungarian situation





Source: Innovation Union Scoreboard 2010



#### **Europe 2020 Strategy**

#### **Europe 2020 strategy objectives:**

Smart (innovation & knowledge based) growth; Sustainable growth; Inclusive growth

#### **Targets for the EU in 2020:**

#### ❖ R&D&I

3% of the EU's GDP to be invested in R&D

#### Climate change and energy sustainability

- greenhouse gas emissions 20% (or even 30%, if the conditions are right) lower than 1990
- 20% of energy from renewables
- 20% increase in energy efficiency

#### Education

- Reducing the rates of early school leaving below 10%
- at least 40% of 30-34 year-olds completing third level education

#### Employment

75% of the 20-64 year-olds to be employed

#### Fighting poverty and social exclusion

at least 20 million fewer people in or at risk of poverty and social exclusion



### National Reform Programme RDI objectives

#### Main goal:

Hungary's innovation performance should reach the EU average by the end of the decade.

#### **Specific objectives:**

- Increase the expenditure on research and development: 1,8 % of GDP (1,2 % in 2011)
- Increase the R&D expenditure of businesses up to 2/3 of the total R&D expenditure
- Prepare the national R&D&I system to be able to absorb more external funding between 2014 and 2020
- National Research, Development and Innovation Strategy 2020
- Hungarian Smart Specialization Strategy
- ❖ Preparation for the research, development and innovation regulations, funds and programmes of the 2014-2020 EU budget period (Horizon 2020 and cohesion funds)



# Investment in the Future - National Research and Development and Innovation Strategy (2013-2020)

#### **Main goals:**

R&D target for Hungary in 2020: 1,8% of the GDP to be invested in R&D

R&D target for Hungary in 2030: 3% of the GDP to be invested in R&D

#### **Specific objectives, 2020:**

- ♦ +30 internationally competitive R&D centres
- ♦ +30 multinational company R&D units
- +30 macro-regional medium-sized companies
- +300 RDI-intensive small-sized companies (gazelles) in the global market
- ❖ Support for +1000 innovative start-up enterprises



#### Sources of R&D funding in Hungary

#### **National Sources**

- Hungarian Scientific
   Research Fund (OTKA)
- Research and Technological Innovation Fund (KTIA)

#### **Cohesion Policy**

- •Structural Funds
  - •ESF
  - •ERDF
- Cohesion Fund

#### **EU Funding**

- •Framework Programmes for RTD (FP7, Horizon2020)
- CIP
- •Etc.

Other Sources: Swiss Contribution, EEA financing mechanism, etc.



### Horizon 2020 (2014-2020)

#### **Total 70 billion €**

#### I. Excellent Science: 31.73 % 1. European Research Council 17,00 2. Future and Emerging Technologies 3,50 8,00 3. Marie Curie actions 4. Research infrastructures 3,23 II. Industrial Leadership: 22,09 % 1. Leadership in enabling and industrial technologies 17,60 2. Access to risk finance 3,69 3. Innovative small and medium-size enterprises 0,80 III. Societal Challenges: 38,53 % 1. Health, demographic change and wellbeing 9,70 2. Food quality and marine research 5,00 3. Energy 7,70 4. Transport 8,23 5. Climate action, resources and raw materials 4,00 6. Inclusive societies 1,70 7. Secure societies 2,20 Spreading excellence and widening participation 1,06 % Science with and for society 0,60 % **European Institute of Innovation and Technology (EIT)** 3,52 % Joint Research Centre: non-nuclear direct actions 2,47 % Total 100 % 100 %

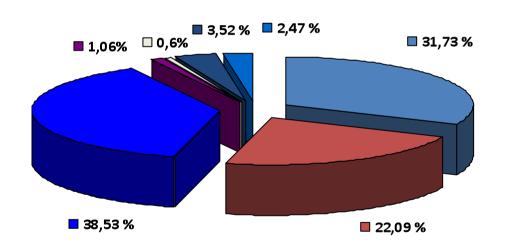
Source:

Agreement on "HORIZON 2020", Brussels, 17 July 2013, 11985/13



#### Horizon 2020 indicative budget, 2014-2020

#### **Total 70 billion €**



- **■** Excellent Science
- Industrial Leadership
- Societal Challenges
- Spreading excellence and widening participation
- ☐ Science with and for society
- European Institute of Innovation and Technology (EIT)
- Joint Research Centre: nonnuclear direct actions



# **Future of Cohesion Policy 2014-2020 Europe 2020 – Thematic objectives**

Deliver the Europe 2020 strategy objectives of smart, sustainable and inclusive growth.

smart Europe 2020 sustainable inclusive

#### 1) Research and innovation

- 2) Information and Communication Technologies
- 3) Competitiveness of Small and Medium-Sized Enterprises (SME)
- 4) Shift to a low-carbon economy
- 5) Climate change adaption and risk management and prevention
- 6) Environmental protection and resource efficiency
- 7) Sustainable transport and disposal of congestion on major network infrastucture
- 8) Employment and support for labour mobility
- 9) Social inclusion and poverty reduction
- 10) Education, skills and lifelong learning
- 11) Increased institional capacity and effectiveness of public



# Indicative budget allocation - planning of the Operational Programmes

Thematic objectives	Indicative budget allocation (%)	Indicative budget allocation EU + national billion HUF (bill. EUR)
1. Research and innovation	9,67%	708,8 ( <b>2,36)</b>
2. Information and Communication Technologies	4,30%	308,4 ( <b>1,02)</b>
3. Competitiveness of Small and Medium-Sized Enterprises (SME)	15,46%	1124,9 ( <b>3,74)</b>
4. Shift to a low-carbon economy	11,34%	830,4 ( <b>2,76)</b>
5. Climate change adaption and risk management and prevention	4,50%	322,7 ( <b>1,07)</b>
6. Environmental protection and resource efficiency	8,37%	616,7 ( <b>2,05)</b>
7. Sustainable transport and disposal of congestion on major network infrastucture	12,12%	869,3 ( <b>2,89)</b>
8. Employment and support for labour mobility	16,04%	1178,2 ( <b>3,92)</b>
9. Social inclusion and poverty reduction	8,76%	653,1 ( <b>2,17)</b>
10. Education, skills and lifelong learning	6,00%	420,7 ( <b>1,4)</b>
11. Increased institional capacity and effectiveness of public	0,44%	31,9 ( <b>0,1</b> )
Technical support	3%	218,5 ( <b>0,72)</b>
Total	100%	7283,6 (24,23)

Source: Ministry for National Economy 1 EUR = 300,55 HUF



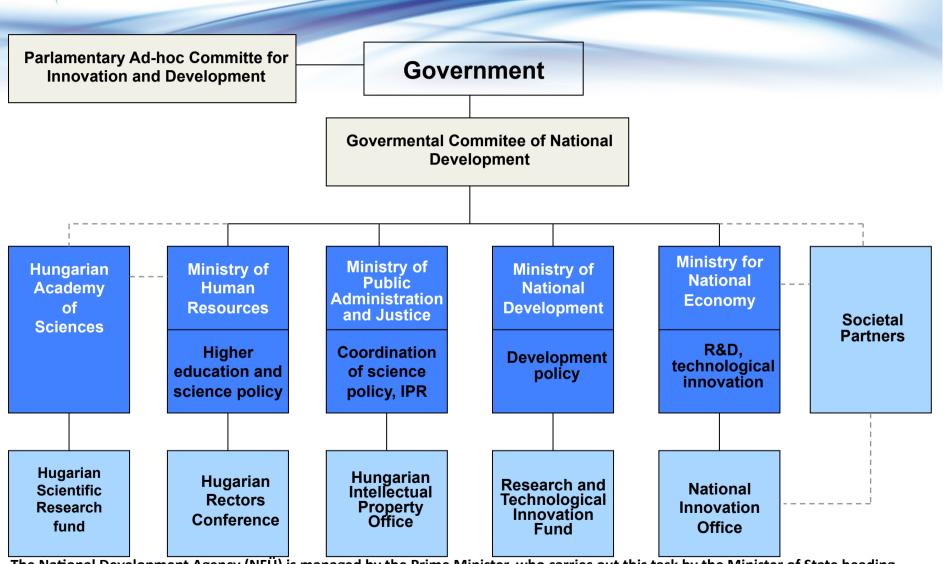
### Indicative budget allocation - planning of the Operational Programmes

Operational Programme	Indicative budget allocation	Indicative budget allocation EU + national billion HUF (bill. EUR)
Economic Development and Innovation Operational Programme (GINOP) (Funds: ERDF, ESF)	39,40%	2 869,7 ( <b>9,55)</b>
Regional Development Operational Programme (TOP) (Funds: ERDF, ESF)	16,15%	1 175,3 ( <b>3,91)</b>
Competitive Central Hungary Operational Programme (VEKOP) (Funds: ERDF, ESF)	3,55%	259,6 ( <b>0,86)</b>
Central and regional economic development	= 59,10%	= 4 304,6 ( <b>14,32)</b>
Human Resource Development Operational Programme (EFOP) (Funds: ERDF, ESF)	10,94%	796,8 ( <b>2,65)</b>
Environment and Energy Efficiency OP (KEHOP) (Funds: Cohesion Fund, ERDF)	14,77%	1 075,8 ( <b>3,58)</b>
Integrated Transport Development Operational Programme (KOP) (Funds: Cohesion Fund, ERDF)	13,69%	997,1 ( <b>3,32)</b>
Implementation Coordination Operational Programme (Funds: Cohesion Fund)	1,50%	109,3 ( <b>0,36)</b>
Total	= 100,00%	= 7283,6 ( <b>24,23)</b>

Source: Ministry for National Economy 1 EUR = 300,55 HUF



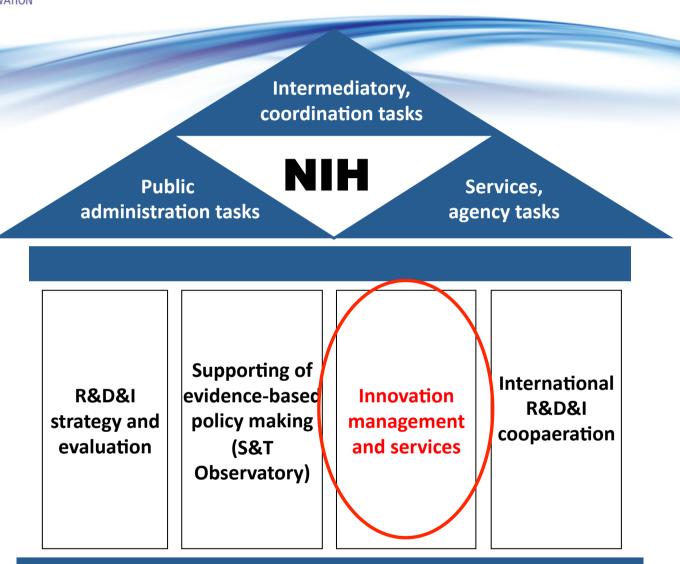
# The Structure of the R&D and Innovation Governance



The National Development Agency (NFÜ) is managed by the Prime Minister, who carries out this task by the Minister of State heading the Prime Minister's Office.



#### The main pillars of the NIH activities



**Effective organisation** 



#### RDI strategy development

- Cooperating in harmonizing Hungarian and foreign strategies (EU, OECD).
- Cooperating in planning and implementing the RDI strategy, devising partial strategies, performing analyses.
- **Coordinating writing documents to support the innovation strategies of priority sectors (eg. Sectoral Strategic Books eg. in Environment protection and Energy).**
- \* Representing R&D in development strategies of other fields.
- Monitoring R&D strategies and programmes, making professional evaluation



#### **Science and Technology Observatory**

The Science and Technology Observatory is an analytical-evaluation database system and knowledge base which contains all of the relevant information in the field of RDI in a homogenous structure.

The Kaleidoscope is the information system of the NIH's Observatory which is designed to promote the networking of the RDI stakeholders.

#### It provides:

- **\$\simeq\$** general and sector specific RDI analysis and statistics
- data structures as basis of analysis
- information about the state supported RDI projects
- research infrastructures
- \* register of research organizations and enterprises
- **\*** search engine for finding consortium partners





#### **Innovation management and services**



**Pont Inno** – Innovation management service and information service on RDI financial recources: pontinno@nih.gov.hu



Kaleidoscope – Statistical information service



**Go!nno** – A complex, web-based innovation service for start-ups & young innovative enterprises – Mentor programme



National support of international projects and cooperations



#### EU and other international RDI activities

- **❖** EU Science and Technology (S&T) Cooperation
- **❖** National activities of the EU FP7 (Horizon 2020)
- Multilateral S&T relations
- **❖** Bilateral S&T International Cooperation
- **Science and Technology Attaché Network**



### Thank you for your attention!