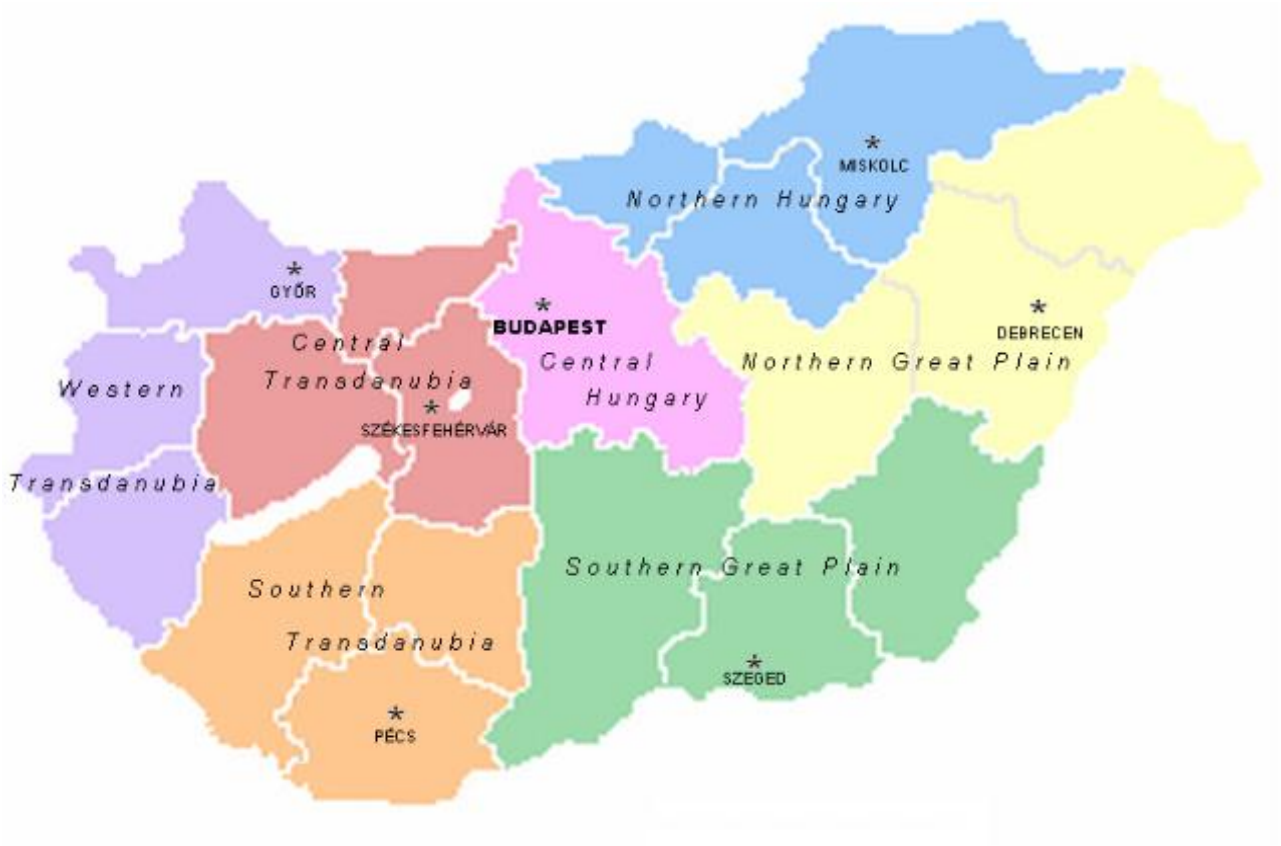
Hungary:
Towards a National S3 strategy



Balázs Borsi (Ministry for National Economy)

Budapest, 25 June 2013

Source of map: wikipedia

The questions we would like the peer critical friends to discuss:

- How can the RIS3 process be tailored to a country, with substantial economic and social disparities and with no real economic regions (apart from the Capital region)?

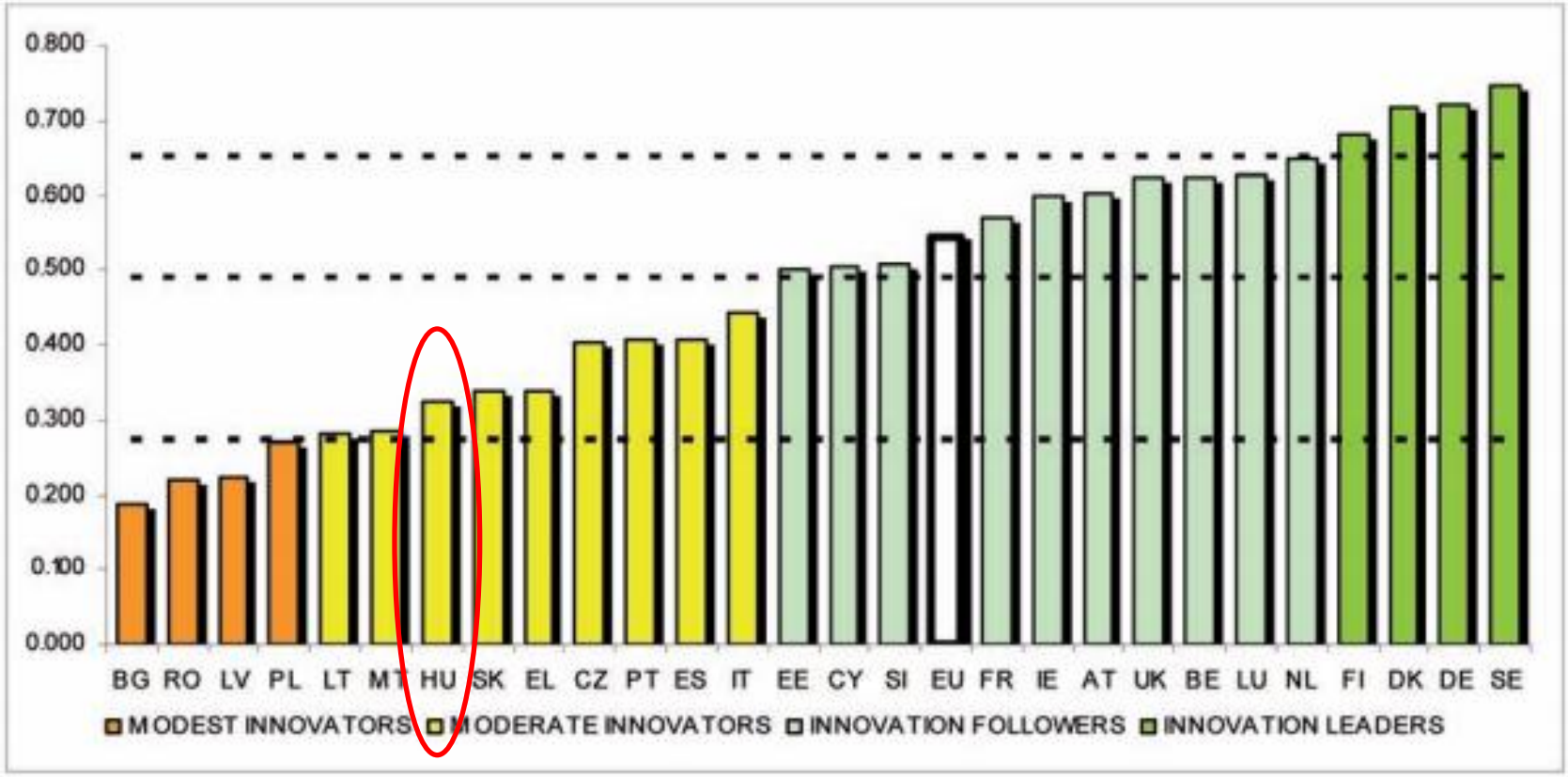
- In terms of RDI-focused planning, evaluation and monitoring, how can the „leap frogging" expected by the S3 process designers be governed in countries lacking such experience?

- What are the good practices of **CONCRETE** examples of formulating a specialisation agenda? Why are they good examples? If possible, examples for innovation leaders and moderate innovators would be of help.

- What will happen if the S3 design and implementation process fails? Will there be conclusions drawn and additional mechanisms introduced also at EU levels? If yes, what are the likely organisational / institutional arrangements to do so?

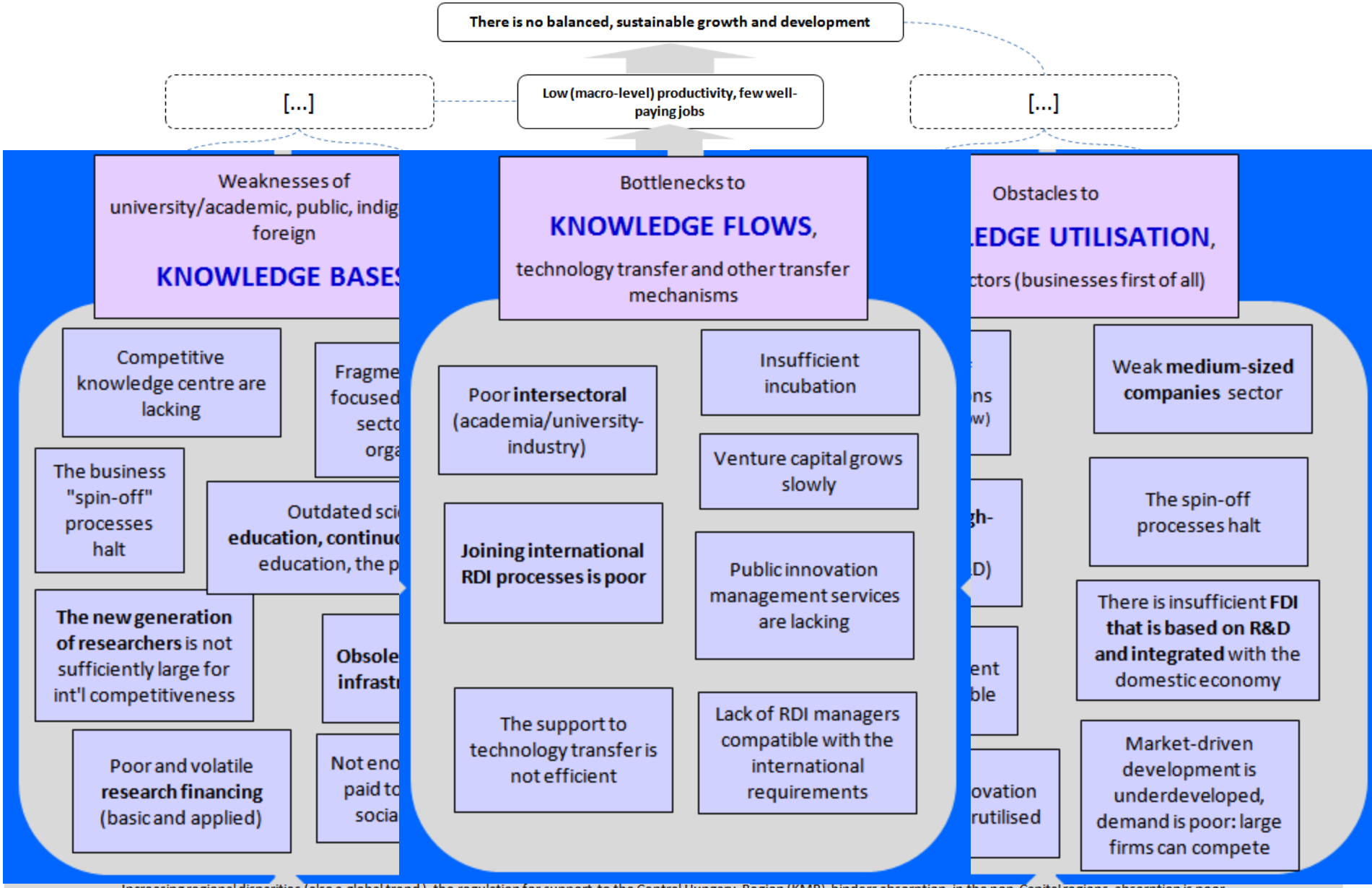
- How would you define non-performing investments in the S3 context?

Summary Innovation Index (SII)



The gap is significant between leaders and moderate innovators…

Source: Innovation Union Scoreboard 2013



Increasing regional disparities (also a global trend), the regulation for support to the Central Hungary Region (KMR) hinders absorption, in the non-Capital regions, absorption is poor

There is not enough awareness for the need for regional specialisation, the related developments are not coordinated

Awareness for innovation, innovation mindedness is poor (including awareness about IPR and risk tolerance)

The **institutional structure and the regulatory environment** supporting RDI is not efficient (including, among others, the grant schemes and evidence-based policy making)

Unfavourable **macroeconomic prospects** in the global economy and Hungary (FDI inflow slowed down, the assessments on competitiveness/business environment deteriorated etc.)

Hungary´s new research and innovation strategy

„With the active support of Hungarian RDI policy, the key players of the National Innovation System strengthen and become invaluable partners in global innovation systems. By capitalising on spillover effects, they boost dynamism in the whole of the national innovation system. Thereby, they make a substantial contribution to the competitiveness of the Hungarian economy, making it a sustainable knowledge economy”

„Investment in Our Future – The National RDI Strategy 2020”

Main objective: **GERD/GDP** ratio shall reach **1.8%** by 2020

(⅔ from business sources)

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

In 2020 in Hungary…

+30 larger R&D labs are in the world elite,

+30 global MNC centres of R&D are deployed,

+30 R&D intensive „macro-regional„ medium-sized firms produce value added,

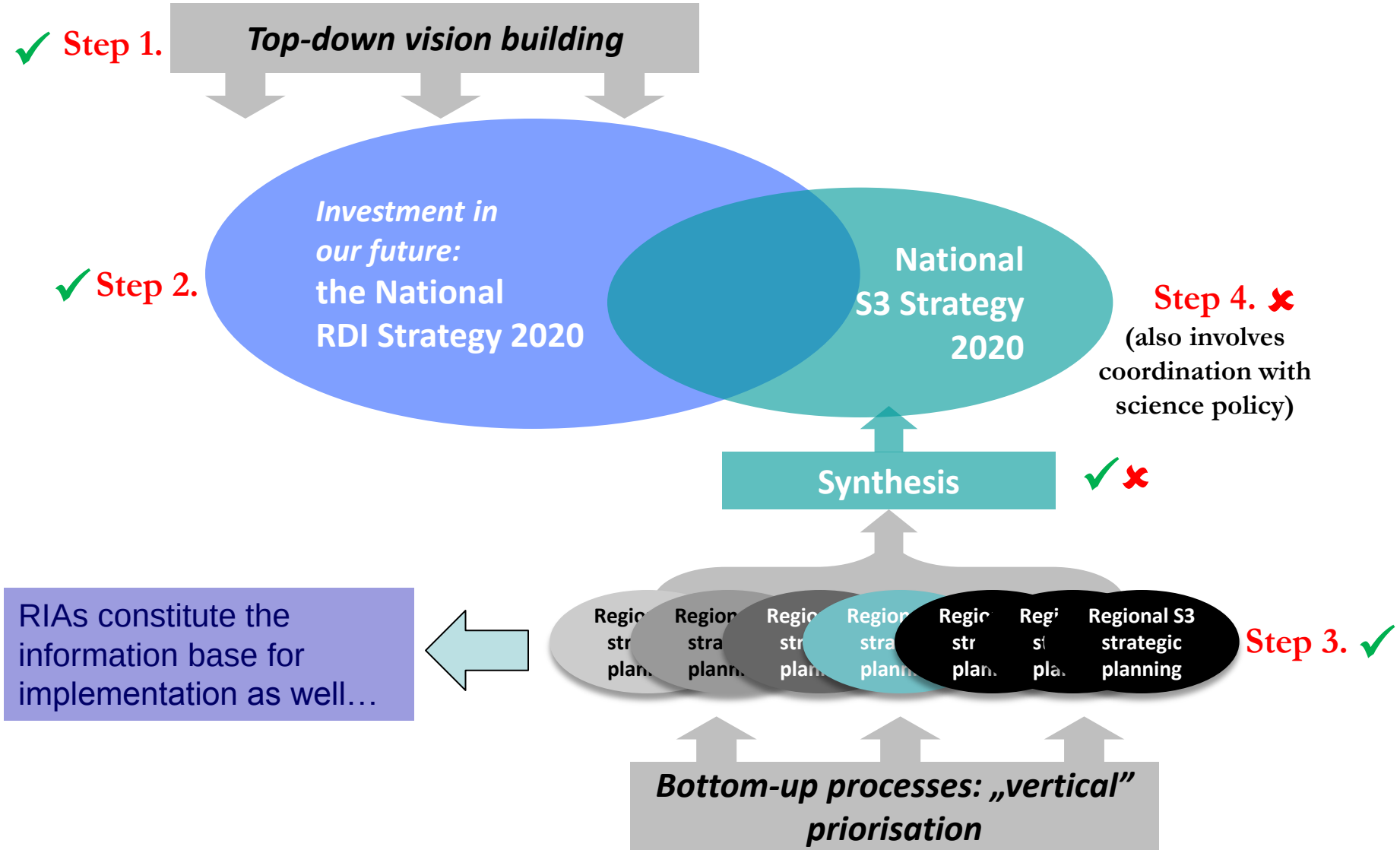
+300 RDI and growth oriented SMEs compete on global markets,

+1000 innovative SMEs have received substantial support,

A substantially larger number of supplier SMEs have business links with the MNCs in the economy.


Globally com
Efficient knowledge utilisation
Training researchers creative profession
Boosting innovative small firms
+300 high-tech small company, +1000 innovative start-ups
Medium-sized firms gaining momentum based on R&D and technology
+30 R&D intensive macro-regional medium-sized MNC
Integrating large foreign-owned companies based on R&D
+30 global MNC centre of R&D
Capitalising on the innovation potential of the public sector
A1. Training and nurt the talented
C1. Building start-up ecosystem
C3. Creating the demand of medium-sized firms for R&D
C6. Jobs of high knowledge-content in large companies with intensive local knowledge cooperations
P1. Boosting innovation in healthcare, energy, education and transportation sectors
A2. Internationall competitive R&D infrastructure
C2. Making IP protection easy and fast
C4. Efficient assistance to entering global markets
C7. More and more innovative SMEs with diversifying markets
C5. Thoughtful government demand for innovation
C5. Thoughtful government demand for innovation
Horizontal system-level foci
grants and initiatives
H6. Stal
evaluation and learning strategic RDI management of the state

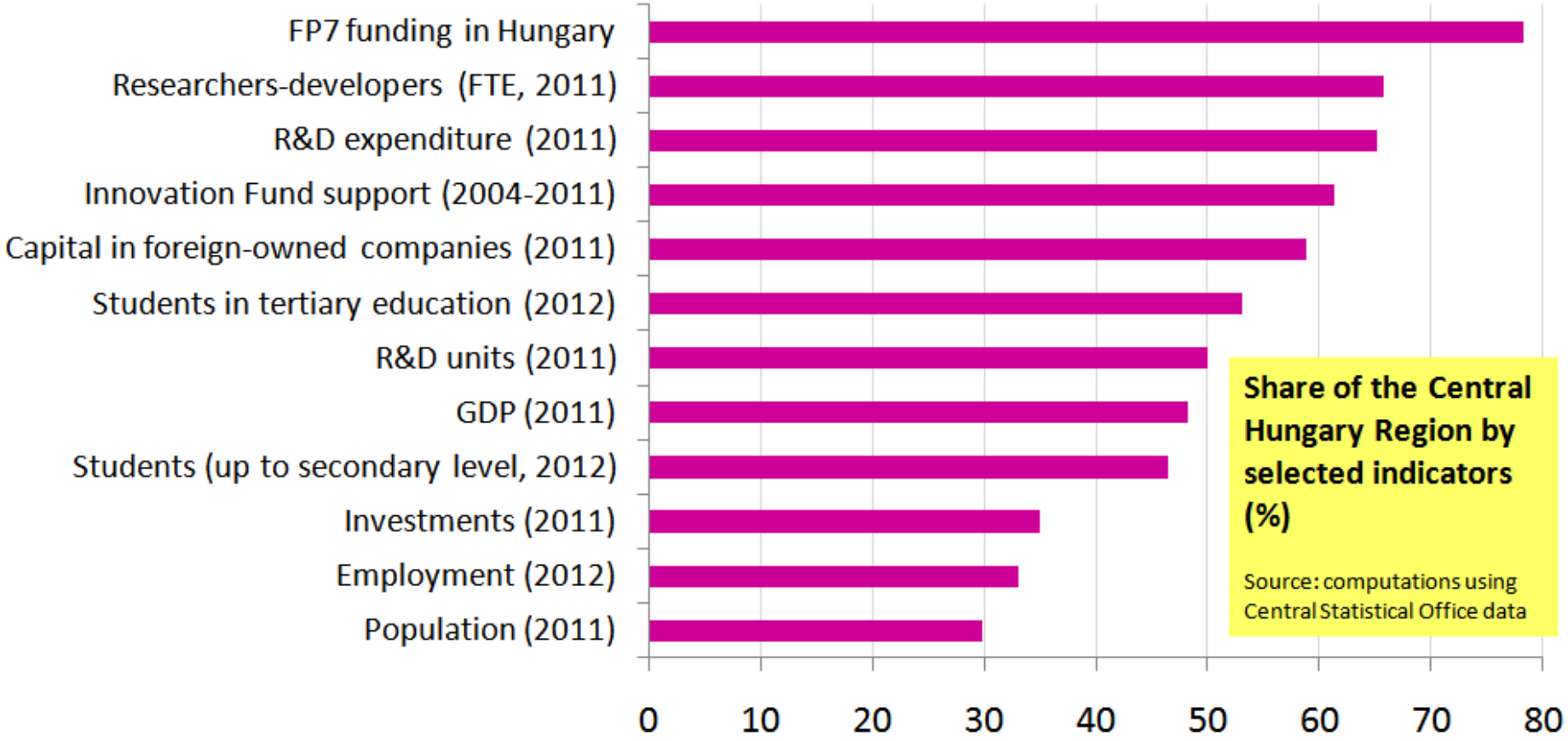
Smart specialisation – the planning framework



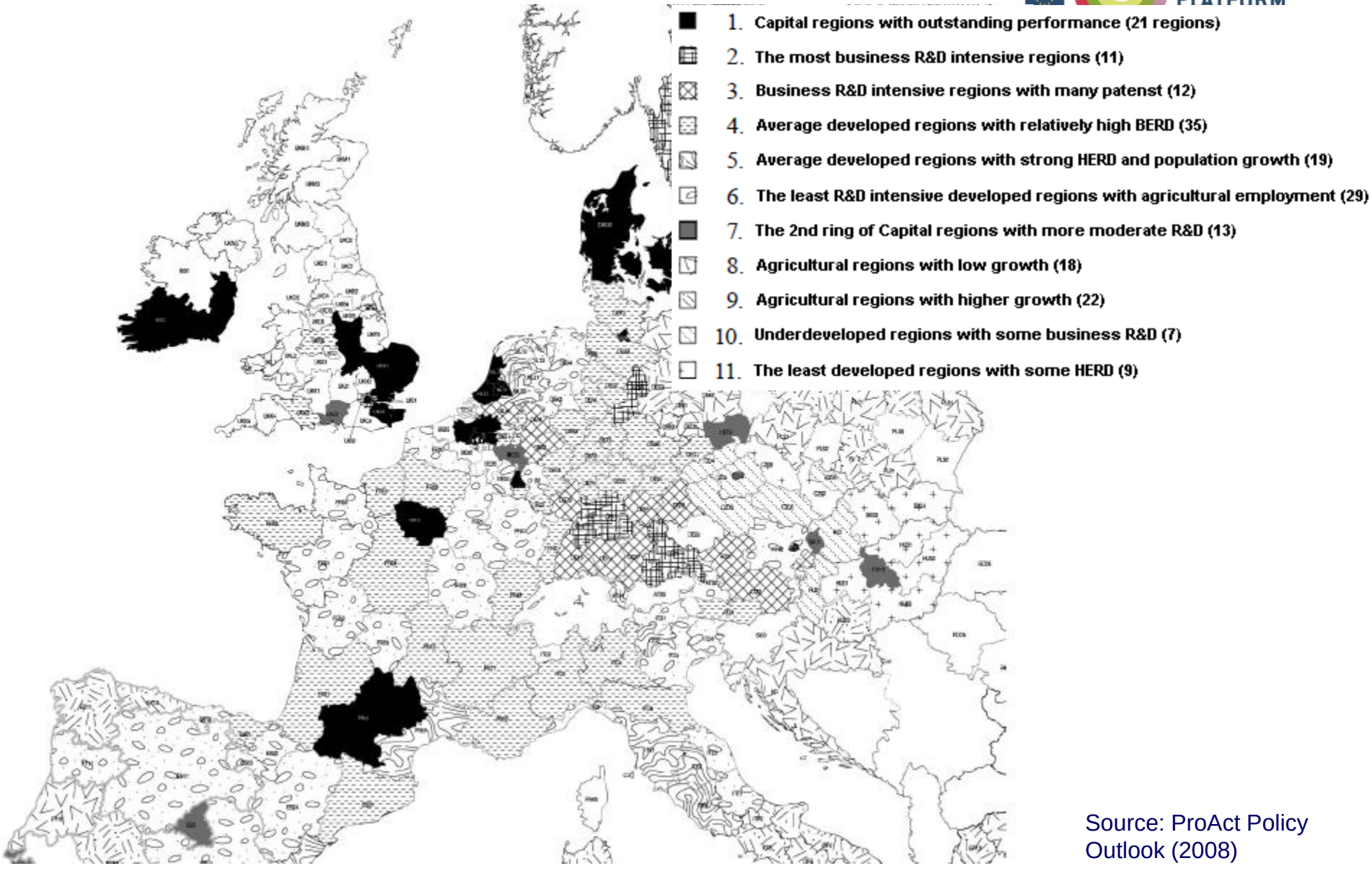
Substantial challenges at the regional level (1)

Economic borders and administrative borders do not coincide

The Central Hungary region has an outstanding weight in the Hungarian innovation system

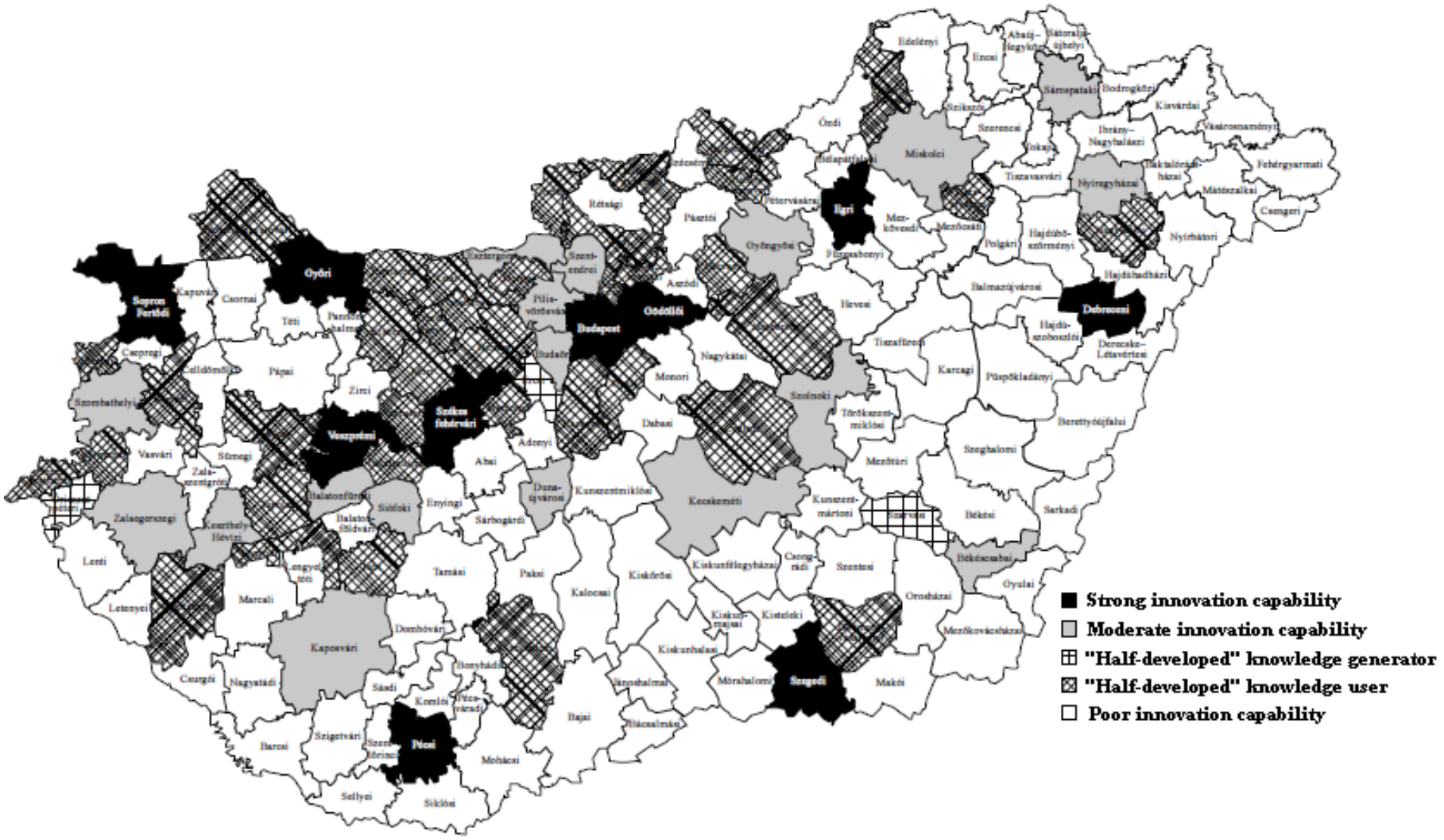


Innovation at the regional level -
Regional Performance Groups



Source: ProAct Policy Outlook (2008)

LAU-1 regions (sub-region) in Hungary by innovative capabilities

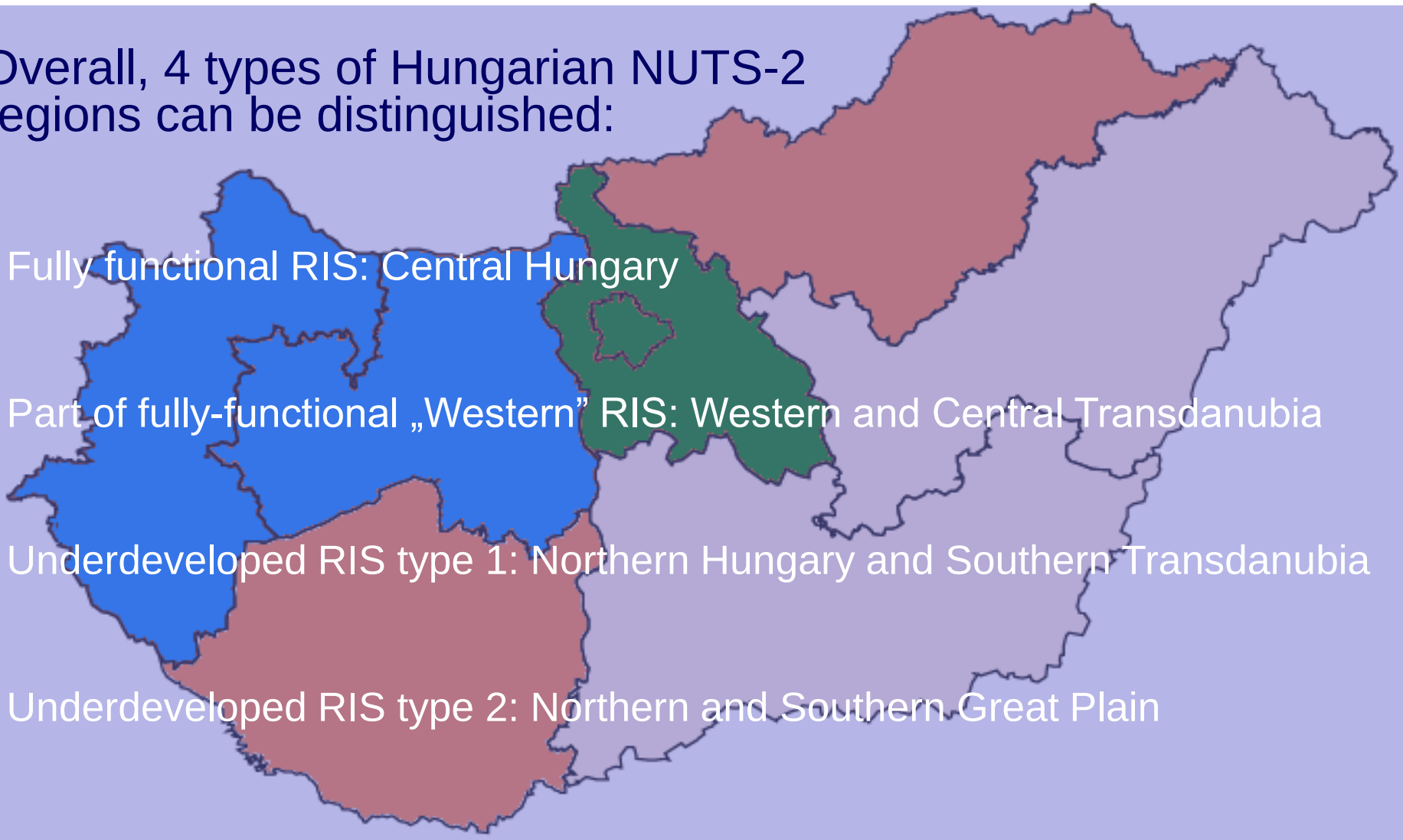


Source: computations by Zoltán Bajmócy and research team.
In: Borsi andBajmócy (2009): Quantitative lagging behind, qualitative catching up? Közgazdasági Szemle LVI évf. 2009. október

Substantial challenges at the regional level (2)

Overall, 4 types of Hungarian NUTS-2 regions can be distinguished:

- Fully functional RIS: Central Hungary
- Part of fully-functional „Western" RIS: Western and Central Transdanubia
- Underdeveloped RIS type 1: Northern Hungary and Southern Transdanubia
- Underdeveloped RIS type 2: Northern and Southern Great Plain



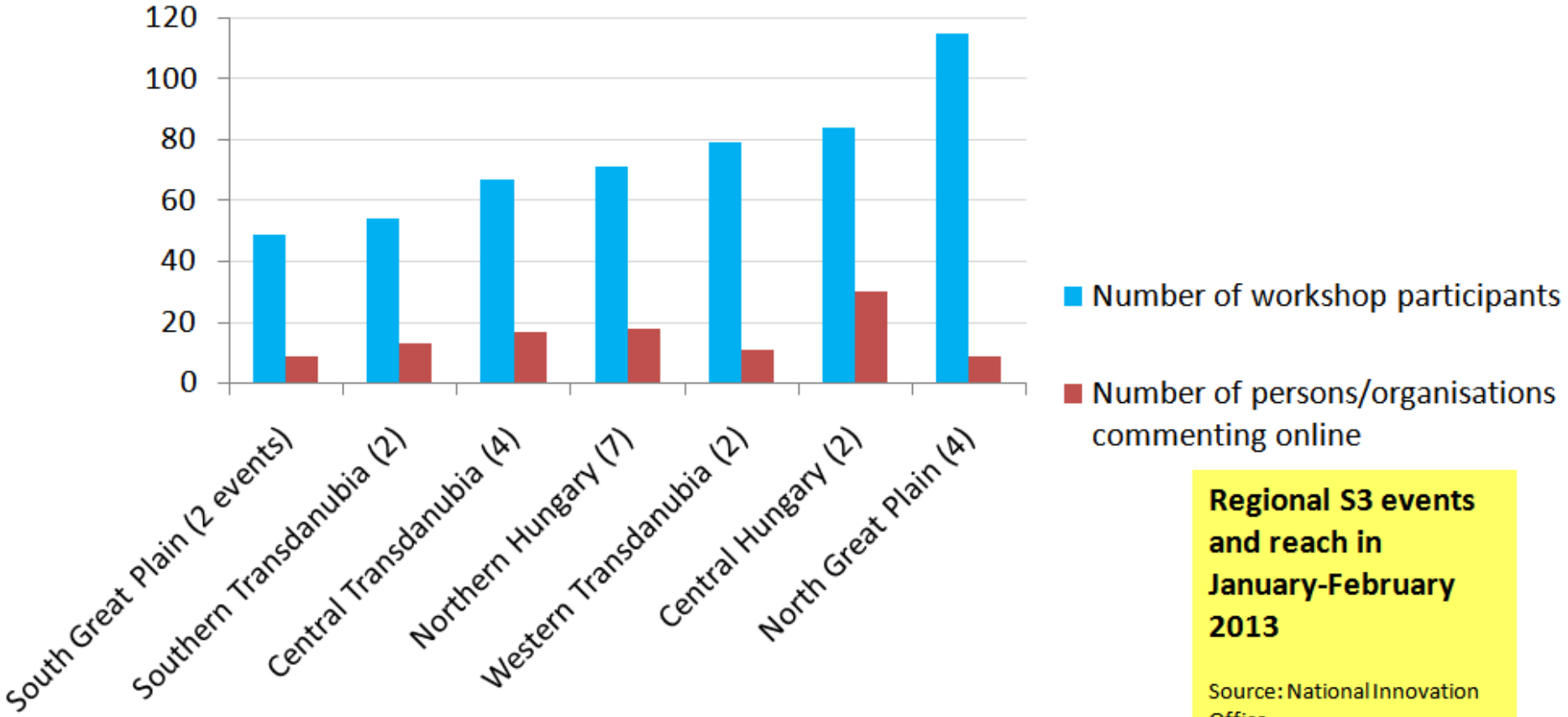
NUTS-2 regions prepared strategy documents

In January-February 2013, the Regional Innovation Agencies prepared strategy documents, following the steps described in the S3 guidance documents:

1. Analysis of the regional context and potential for innovation
2. Governance: Ensuring participation and ownership
3. Elaboration of an overall vision for the future of the region
4. Identification of priorities
5. Definition of coherent policy mix, roadmaps and action plan
6. Integration of monitoring and evaluation mechanisms

Consultations in NUTS-2 regions about the strategy documents

In-depth interviews (82) with stakeholders + workshops were organised during the process…



Regional S3 events and reach in January-February 2013

Source: National Innovation Office

Synthesising the regional S3 strategy documents and building the national S3 framework

After collecting the regional S3 strategy documents, analysis of four areas at the national level:

- RDI-based synergies between regional plans **ongoing**
- Analysis of sectoral strategic white papers and other past achievements **ongoing**
- Regional governance structure *(embedded into national STI coordination)* **ongoing**
- International and EU linkages **to be done**
- R&D and innovation infrastructure **ongoing**

Alignment of the national RDI Strategy and the S3 synthesis strategy

Elaboration of metrics and indicators

Social consultation of the National S3 Strategy 2020 in the regions (end of Summer)

Finalisation and submission to the Commission (**end of October**)

The coordination between the regional and national levels is challenging.

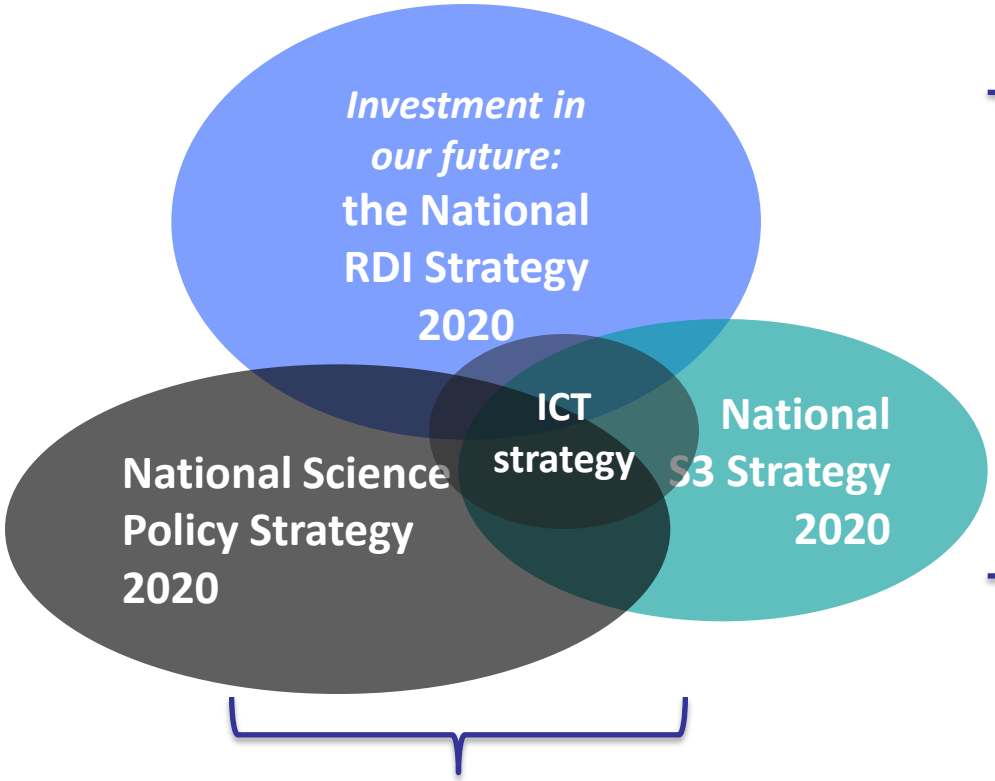
National framework for developing the final regional S3 „specialisation mix” (draft version only!*)

	Specialisation directions		
	1. multidisciplinary and technology fusion-driven transformation of science and/or KET development	2. New knowledge driven lifestyle and health	3. Network-based and „value chain learning” economy, industrial based innovation
Central Hungary	A globally competing region – *tackling all?*		
Western Transdanubia	*(Regions with relatively strong, and globally relevant industry networks and connected higher education/research)*		
Central Transdanubia	✓	✓ ✓ ✓	✓ ✓ ?
Southern Transdanubia	*(Some sporadic industry players yet weak economy in general, higher education and research is (usually) locally important and relevant)*		
Northern Hungary	✓	✓ ✓	✓ ✓ ✓ ?
Northern Great Plain	*(Economy is the least competitive, strong (often interdisciplinary) research with international connectivity)*		
Southern Great Plain	✓ ✓ ✓	✓ ✓	✓ ?

*before detailed processing of the regional strategy documents and finalisation of the synthesis

Required strategic integration for RDI-based growth

(only the main and RDI-relevant funding sources are illustrated)



Entrepreneurial dynamics – a historical challenge

- Interpretation of the 'entrepreneurial process of discovery':
  - Ideally it resembles „Quadruple Helix" dynamics, whereby regions behave like „entities" and can make decisions like corporations do and through the entire 'process', business actors take a leading role. Note the specific regional context in Hungary…
  - It is „common sense" specialisation… what is worth to invest in?
  - Examples and potentials: there are only local examples, such as BKIK and the start-up community, Kecskemét and the Mercedes factory, or Pannon Nóvum RIS…
- Involvement of the business community in developing the RIS3:
  - In practice, only short time was available (but there is an attempt to extend the involvement during Summer and beginning of Autumn)
  - „questionable execution of bright ideas" in the RDI domain has historically made business actors less willing to get involved
- Tackling the challenge: the regions' involvement
  - Regional consultation of the National RDI Strategy took place in November-December 2012
  - The regional S3 strategy documents were prepared with the involvement of the local business community in the discussion process
  - „Grand project ideas" were collected from the regions and are being processed

Governance

- The RIS3 design process is coordinated by the Department for Innovation and R&D (Ministry for National Economy) and the National Innovation Office
  - For the National RDI Strategy, there was a consultation body, the „Innovation Advisory Council", involving different actors
  - For the RIS3 process, there is a partnership between the Regional Innovation Agencies and the Ministry
- Relevant actors at the regional level are identified and approached by the RIAs. They were engaged in the development of the strategy more than in the past, however, it is far from involvement levels in more developed economies / societies
- National and regional governance bodies and mechanisms are still to be defined
  - High-level S&T policy coordination body is to be introduced
  - For S3 a fully centralised governance system at the national level is planned
  - Chief scientists for facilitating public-sector RDI is to be introduced in the ministries at deputy-secretary level
- Future governance mechanisms to facilitate an entrepreneurial process:
  - Social consultation still in this planning phase – and if time and resources allow, a delphi-survey
  - Involvement of business and civil actors in the governance
- Flexibility mechanisms are already part of the National RDI Strategy. In terms of S3 prioritisation, flexibility mechanisms are to be designed

Digital Growth Priorities

- The Digital Growth Strategy („National Infocommunication Strategy 2014-2020”) is being finalised and goes for public consultation process these days
- The following target intervention areas have been identified:
  - Digital infrastructure – a horizontal area
  - Digital competencies (e-literacy + e-inclusion)
  - Digital economy (innovative developments, e-governance, digitalisation of contents, e-services, RDI)
  - Digital state

- The *Digital Agenda for Europe* have been taken into account in depth

- Accompanying indicators are identifed and are being finalised

- The regional aspects for the digital growth agenda are not distinguished, priorities are set on the national level

Implementation and Budget

- The National **RDI Strategy** is implemented in bi-annual action plans
  - KTIA (Research and Technological Innovation Fund) ≈ an annual EUR 170 million
  - EDIOP [GINOP] = HUF 500 bn (≈ EUR 1,7 bn) for the 7 years
  - Tax measures
- The National **S3 Strategy** is implemented using the EDIOP [GINOP] and the KTIA first of all, but CHOP [VEKOP] also has its role
  - The flexible framework is planned to be maximised for CHOP [VEKOP] ≈ 15% of the above
- Synergies between different policies and funding sources are still being designed, including role of financial instruments (such as Jeremie, seed funds, combined grants/loans etc.)
- Relevant stakeholders are to be involved in the implementation stage as members of advisory board (national and/or regional, to be defined, see the slides on governance)
- Private R&D+I investments are stimulated foremost by the National RDI Strategy (tax measures + collaborative R&D), for the S3 process, such options have not yet been explored
- Implementation is planned as part of the central EDIOP [GINOP] Managing Authority (an „S3 unit”), however, details are still to be worked out
  - RIAs would play role in monitoring and project generation
  - Coordination to be ensured by a monitoring committee

The EDIOP [GINOP] measures under priority axis 2

„Development of the knowledge economy”

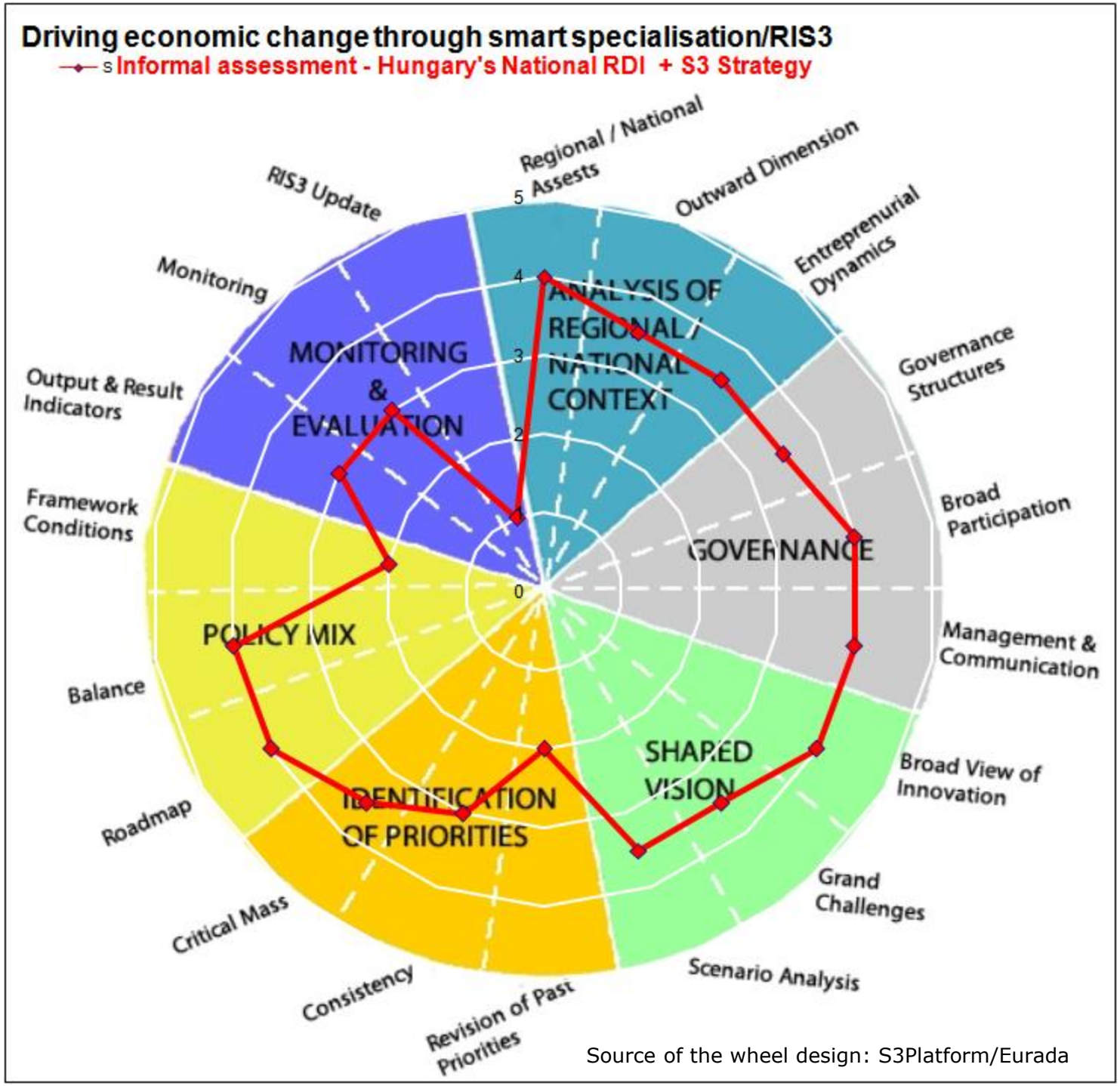
- Measure 1: Support of business RDI activity
- Measure 2: Support of strategic RDI collaborations and initiatives
- Measure 3: Promotion of scientific and technological excellence, support of international R&D connections

The planned interventions of the measures are fully aligned with the RDI Strategy – coordination with the S3 plans is ongoing

Measuring the progress

- Monitoring and evaluation mechanisms:
  - Monitoring indicators for the national level are to be developed during 2014
  - Indicator collection for the RDI Strategy is planned to be the monopoly of the RDI Observatory in the National Innovation Office
  - Independent evaluation is an integral part of the National RDI Strategy
  - A similar approach is to be elaborated for the S3 process, including a review of the strategy based on the evaluation outcomes to weed out non-performing investments

- Challenges in relation to monitoring at regional level
  - Whether or not the required integration of the monitoring systems will be possible
  - Whether or not enough time and resources can be dedicated to developing an indicator system, that is, among others, relevant for all evaluations foreseen


Driving economic change through smart specialisation/RIS3
s Informal assessment - Hungary's National RDI + S3 Strategy
Regional / National Assests
Outward Dimension
Entreprenurial Dynamics
Governance Structures
Broad Participation
Management & Communication
Broad View of Innovation
Grand Challenges
Scenario Analysis
Revision of Past Priorities
Consistency
Critical Mass
Roadmap
Balance
Framework Conditions
Output & Result Indicators
Monitoring
RIS3 Update
ANALYSIS OF REGIONAL / NATIONAL CONTEXT
GOVERNANCE
SHARED VISION
IDENTIFICATION OF PRIORITIES
POLICY MIX
MONITORING & EVALUATION
5
4
3
2
1
0
Source of the wheel design: S3Platform/Eurada

Summary and next steps

- For the Hungarian socio-economic context, a top-down planning combined with bottom-up building of technological and sectoral priorities was chosen
- The national RDI Strategy, the national S3 strategy, the Science Policy Strategy and the ICT Strategy constitute an integrated planning framework for RDI based growth
- A common specialisation planning framework is being developed using the regional strategy documents, however, the OPs cannot wait for the final S3 plans, therefore, **continuous information flow** is ensured
- When the national level synthesis is finished, a regional and national social consultation is planned to reinforce participation of the regional stakeholders

- What is needed (in the short and medium term) to develop and implement a good RIS3 in Hungary?
  - Conclude the planning process and establish a governance structure that is linked both to the RIS3 process and the National RDI Strategy
  - Develop and start running a monitoring framework suitable for data collection and analysis throughout the 2014-20 period
  - Use of evaluations in a ‘smarter’ way
  - Useful activities include organisation of high-level meetings, where decision makers regularly meet the dilemmas of experts and learn from each others’ practices

Awareness and supportive environment

- How aware of the processes and supportive are:
  - Hungarian politicians?
  - the regional/national administrations?
  - the business community?
  - the Hungarian government?

…improving rapidly… ☺

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THANK YOU VERY MUCH FOR YOUR ATTENTION!

SMART SPECIALISATION PLATFORM

MINISTRY FOR NATIONAL ECONOMY

NIH NATIONAL INNOVATION OFFICE