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Monitoring and implementation – Lessons from the EU policy experience

Better Policies for More Innovation
Assessment – Implementation – Monitoring
Minsk, Belarus, 17 - 18 November 2015



ГОСУДАРСТВЕННЫЙ КОМИТЕТ
ГКНТ
ПО НАУКЕ И ТЕХНОЛОГИЯМ

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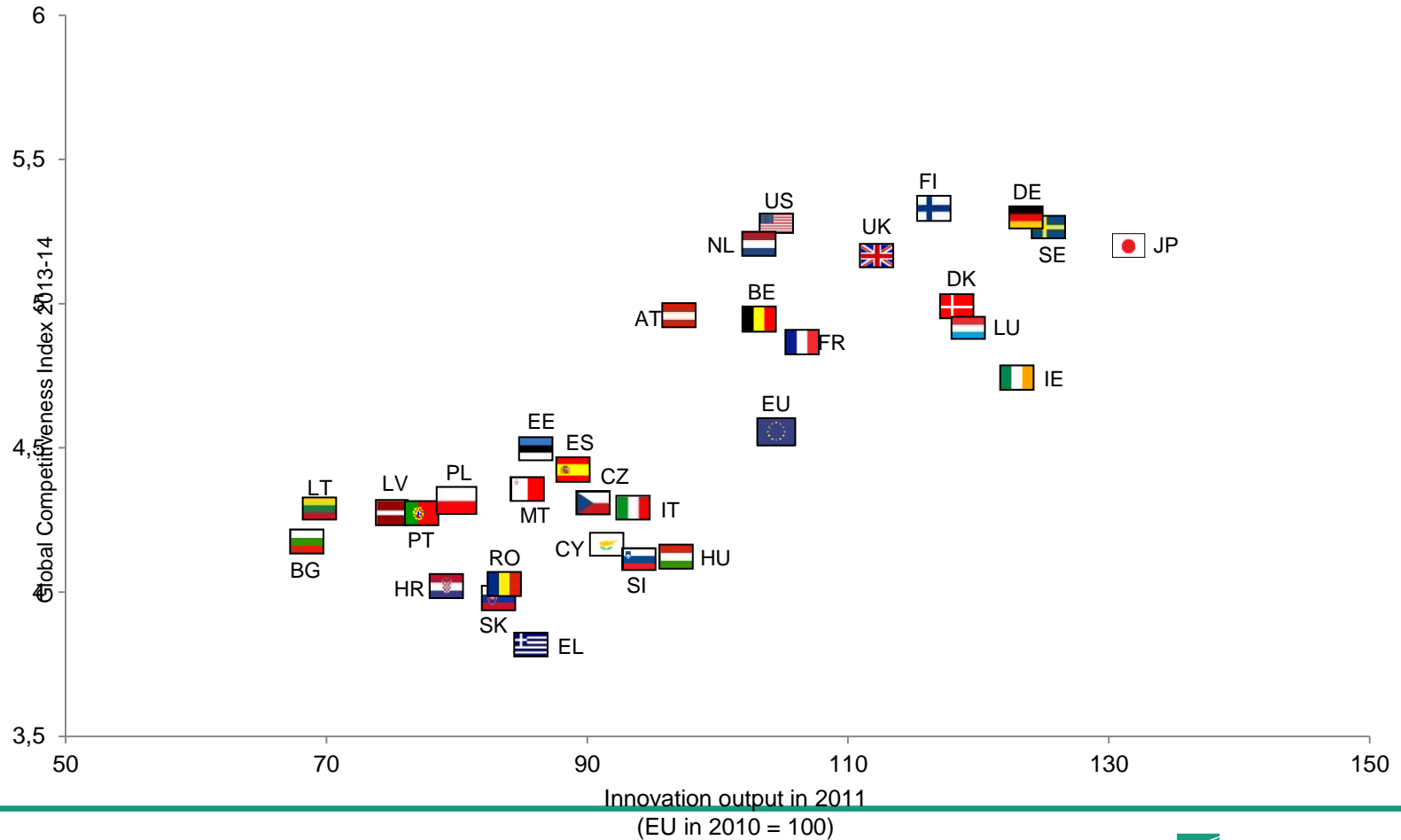
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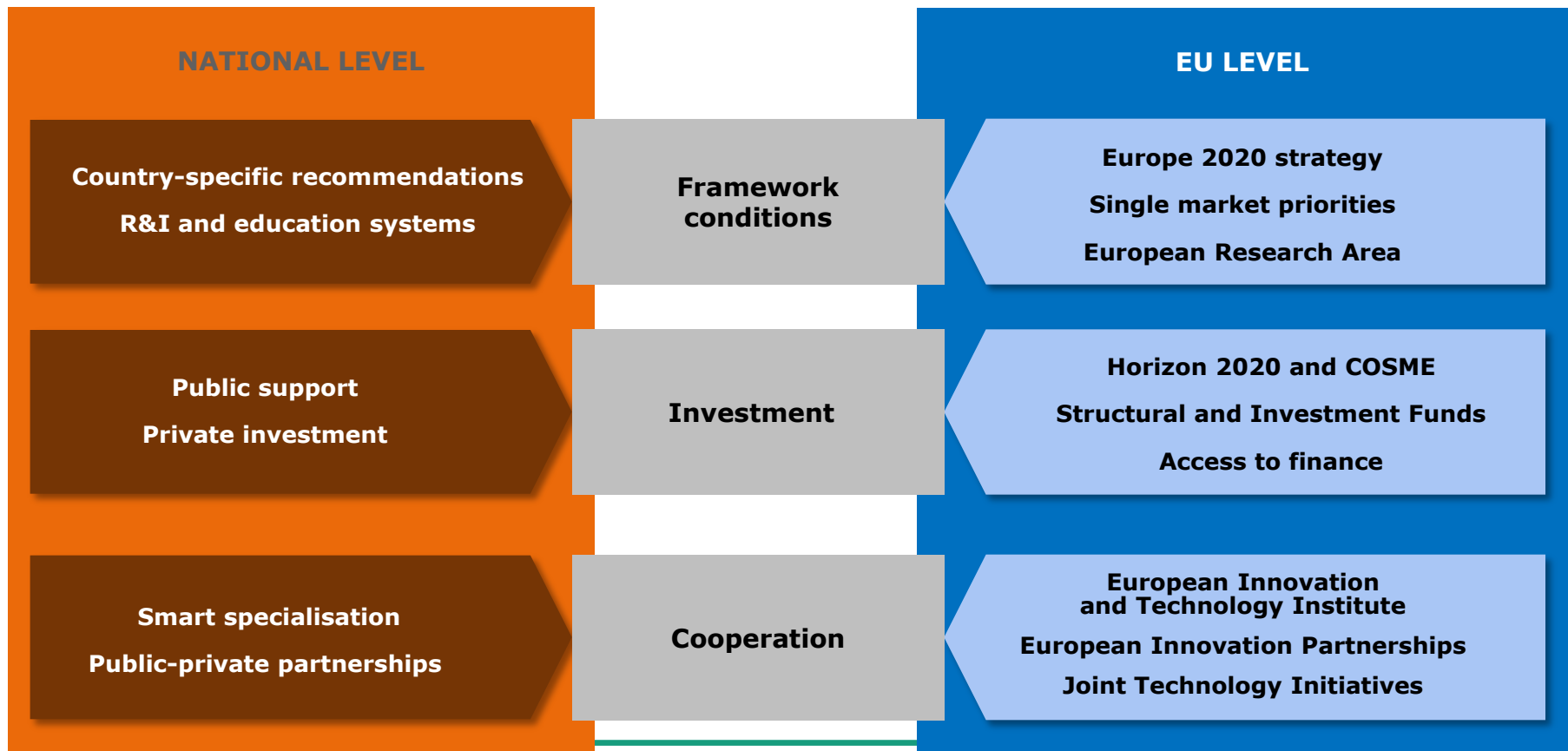
- 1. The EU's strategic reasoning that guides the monitoring of innovation performance**
2. Spotlight on EU monitoring activities: Innovation Union Scoreboard (IUS)
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Innovation is key to our competitiveness

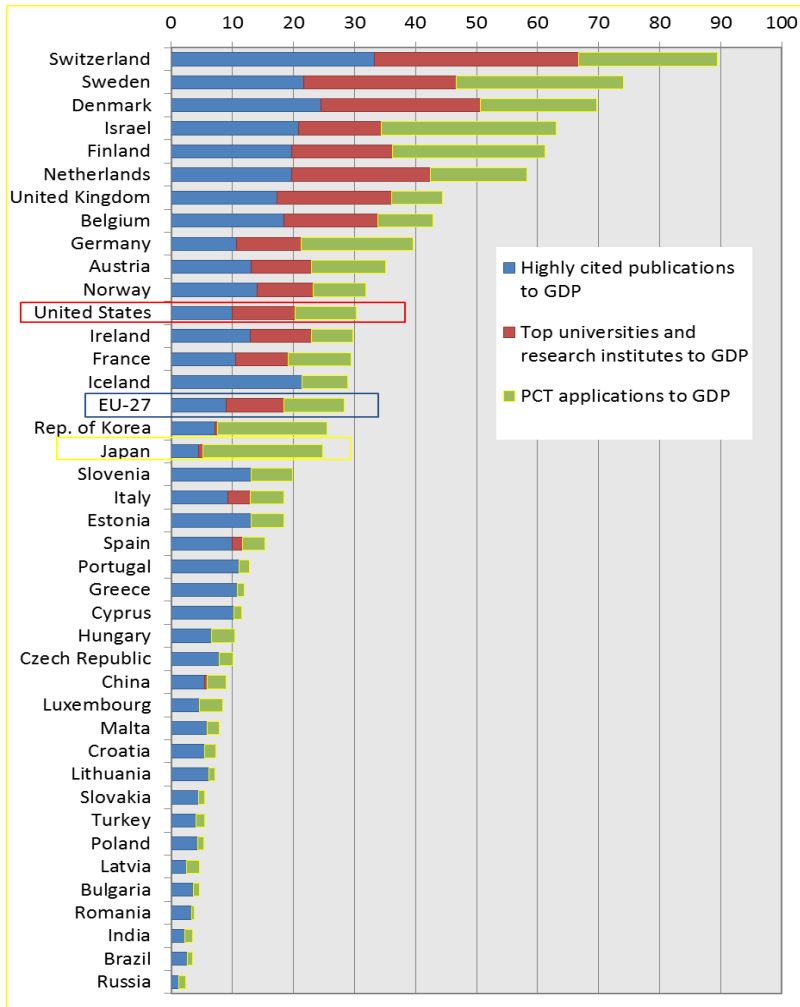
Global competitiveness index *versus* innovation output indicator



A lot can be done, both at national and transnational level

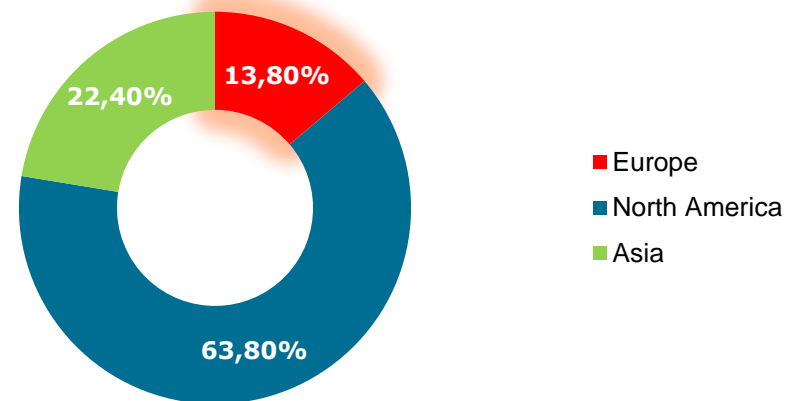


EU has many science assets ...



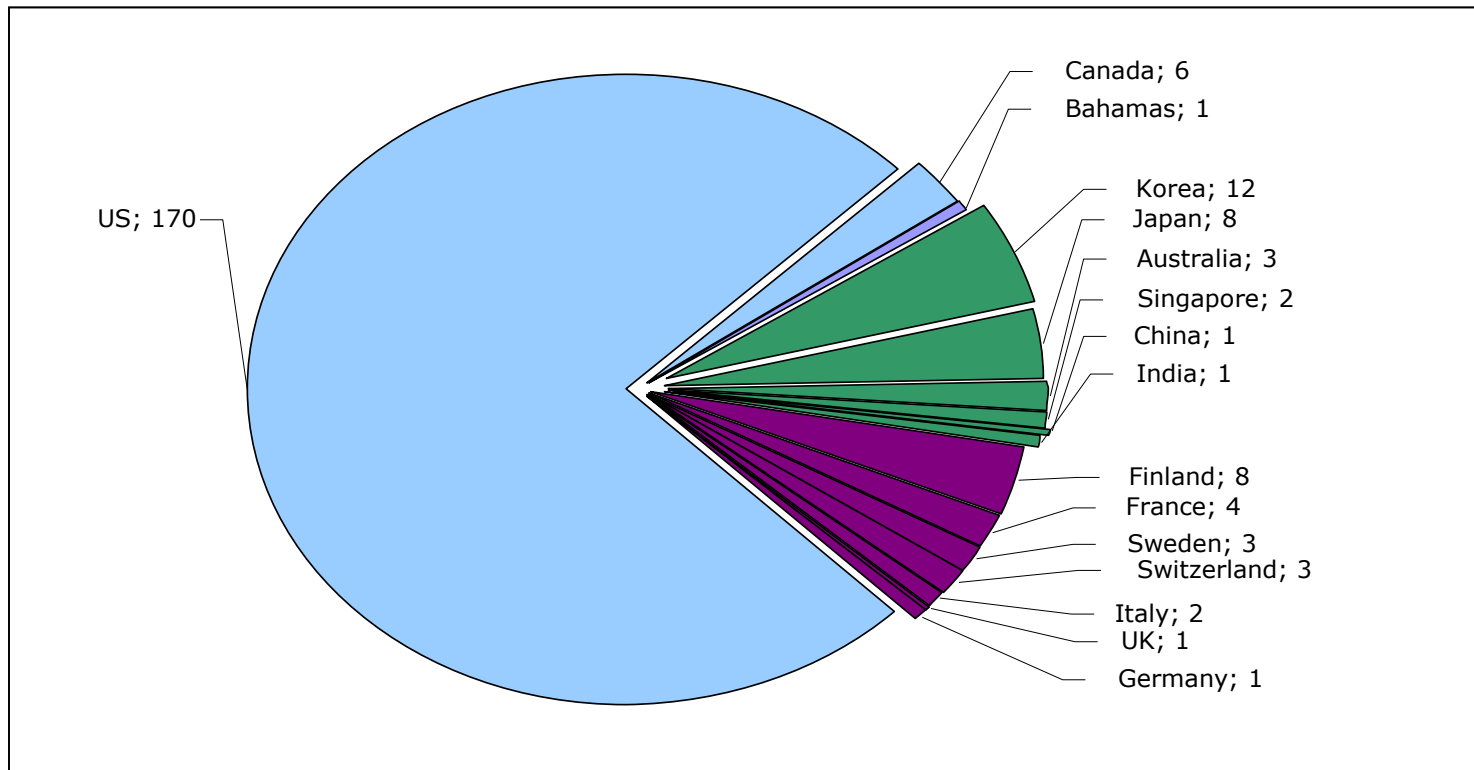
... yet it lacks the critical mass to become a global leader

Citations in top 10% science journals



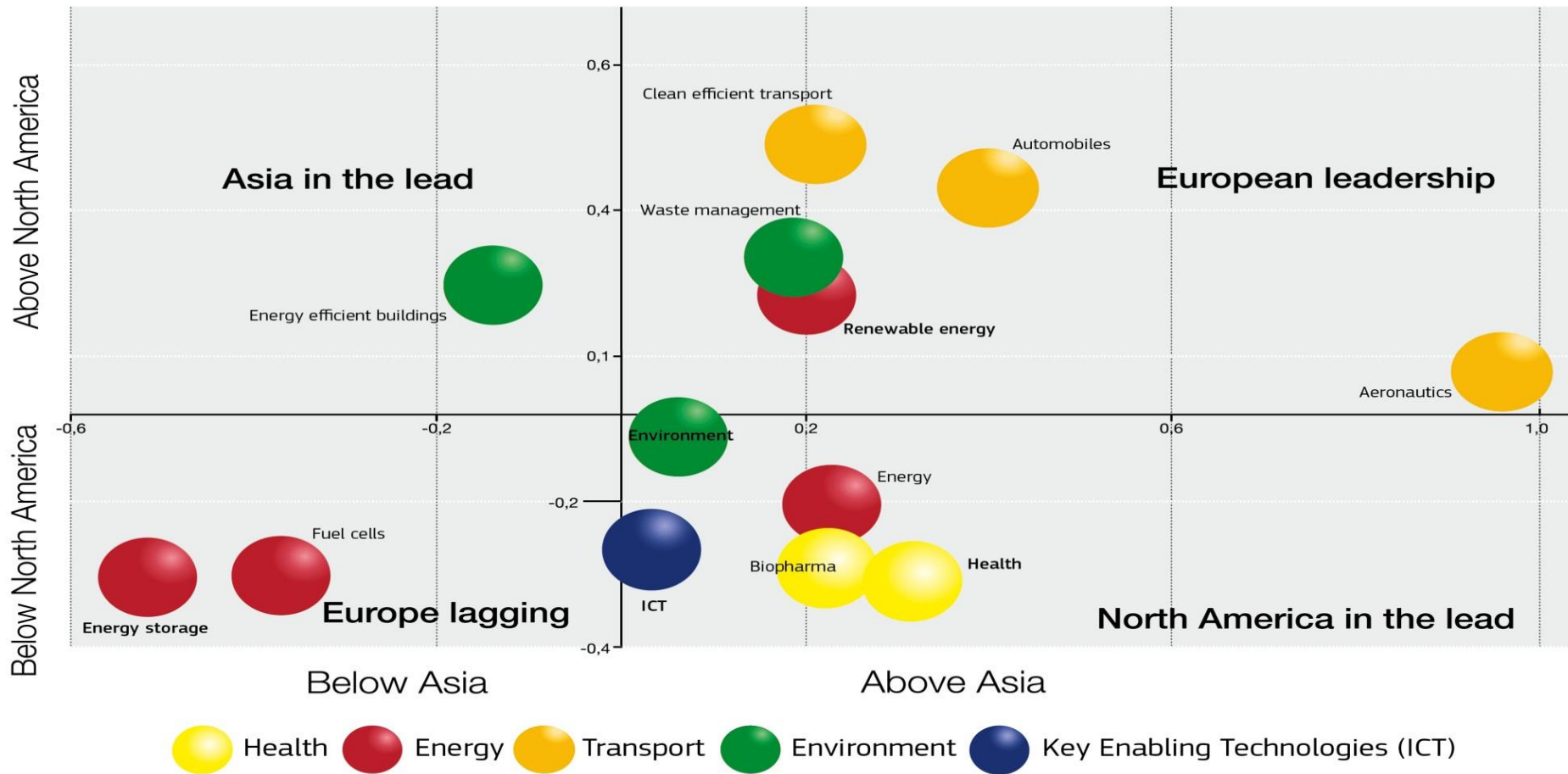
Europe missed out on Web 2.0

'Web 2.0' patent applications



Source: JRC (IPTIS) keyword search in the WIPO patent scope database: 2008.

It must seize now tomorrow's markets

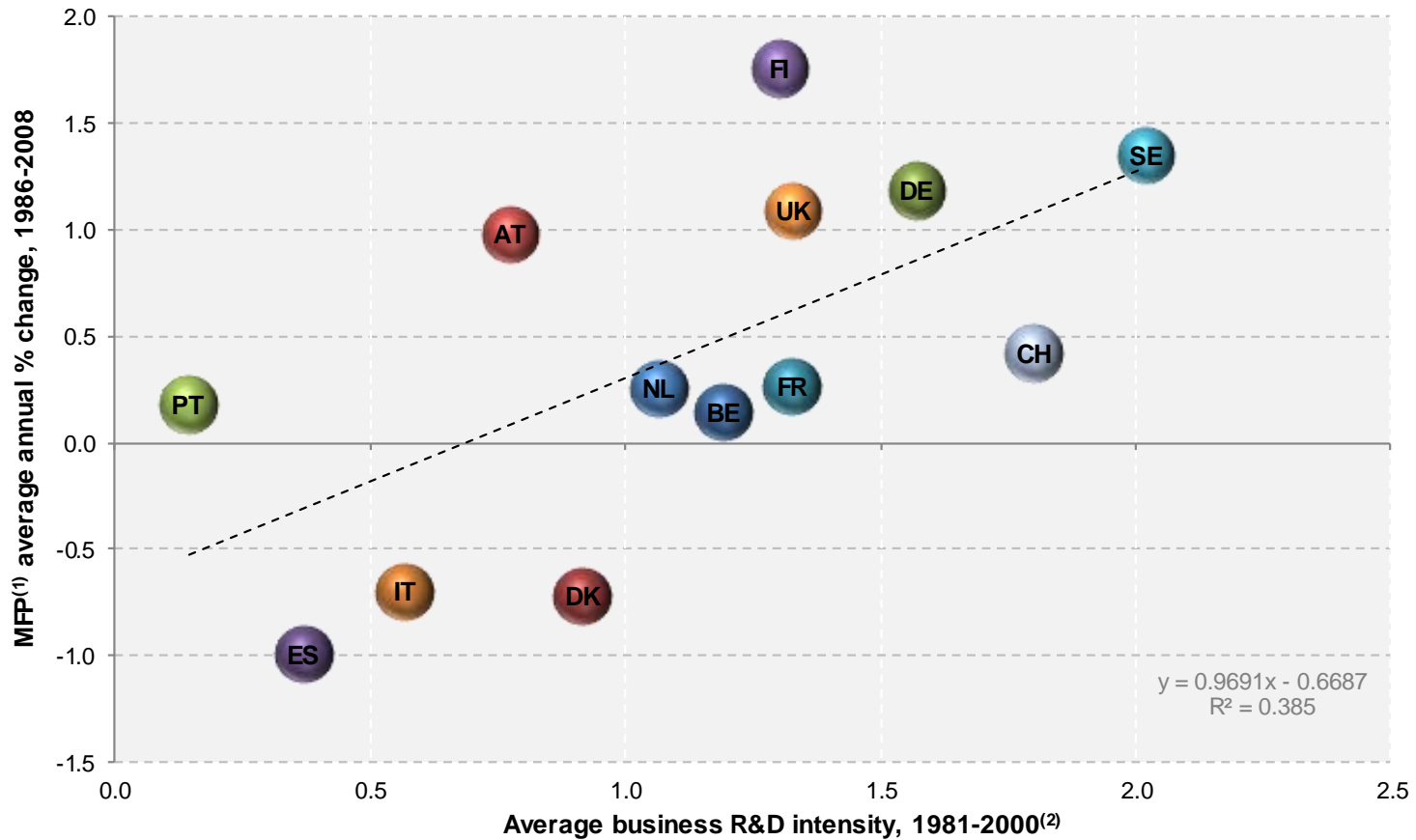


Source: DG Research and Innovation

Data: OECD patent database and specific

Investing in knowledge drives competitiveness

Business R&D intensity and multi-factor productivity



Source: DG Research and Innovation - Economic Analysis unit

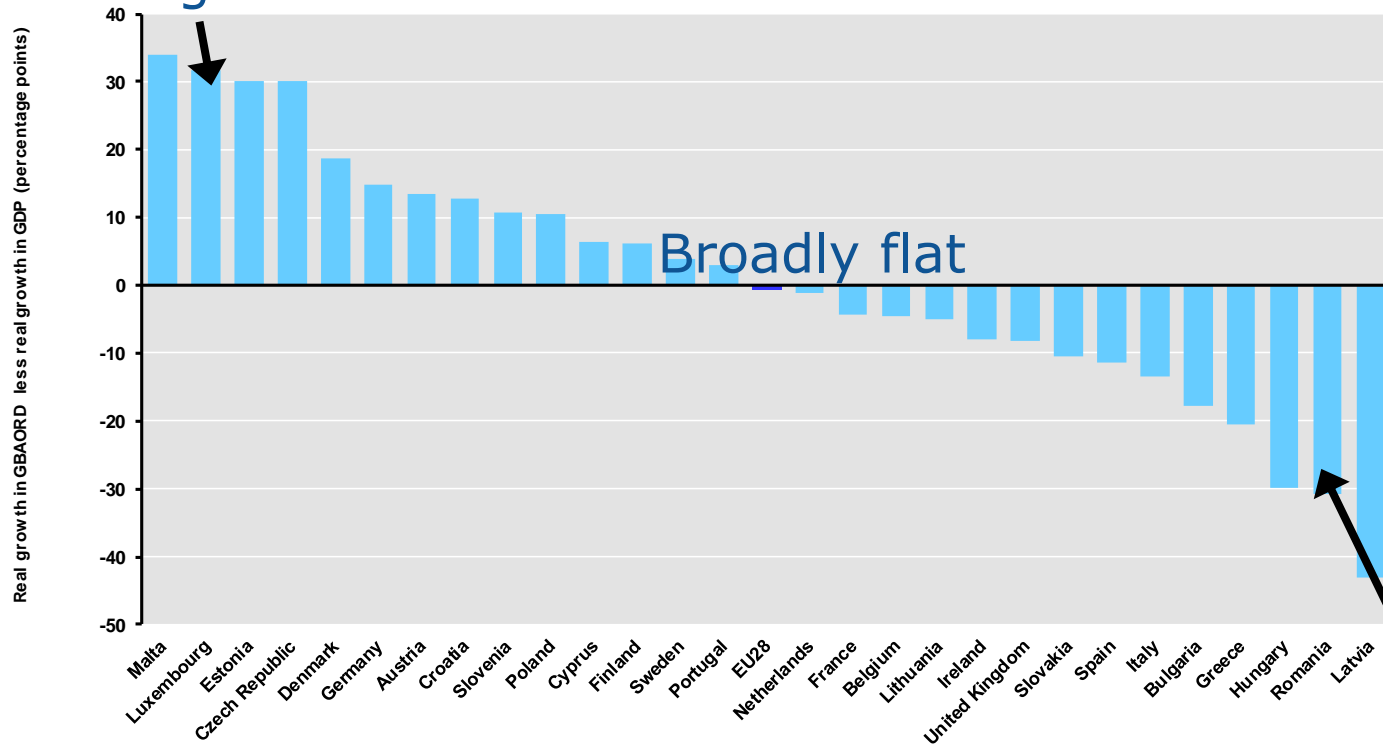
Data: (1) Multi-factor productivity (OECD): Dan Andrews & Chiara Criscuolo, 2013. "Knowledge-Based Capital, Innovation and Resource Allocation", OECD Economics Department Working Paper 1046, OECD Publishing

(2) Business R&D intensity (Eurostat): DE: 1991-2000; IT: 1990-2000; AT: 1981,1984-1985,1989,1993,1998; PT: 1995-2000; SE: 1981,1983,1985,1987,1989,1991,1993,1995,1997,1999; UK: 1981,1983,1985-2000; CH: 1981,1983,1986,1989,1992,1996,2000

So, we must protect public R&D spending ...

Government investment in the future
The difference in percentage points between real growth ⁽¹⁾ in government budget appropriations or outlays for R&D (GBAORD ⁽²⁾) and real growth ⁽¹⁾ in GDP, 2008-2012 ⁽³⁾⁽⁴⁾

Increasing



Decreasing

Source: DG Research and Innovation - Economic Analysis Unit

Data: Eurostat

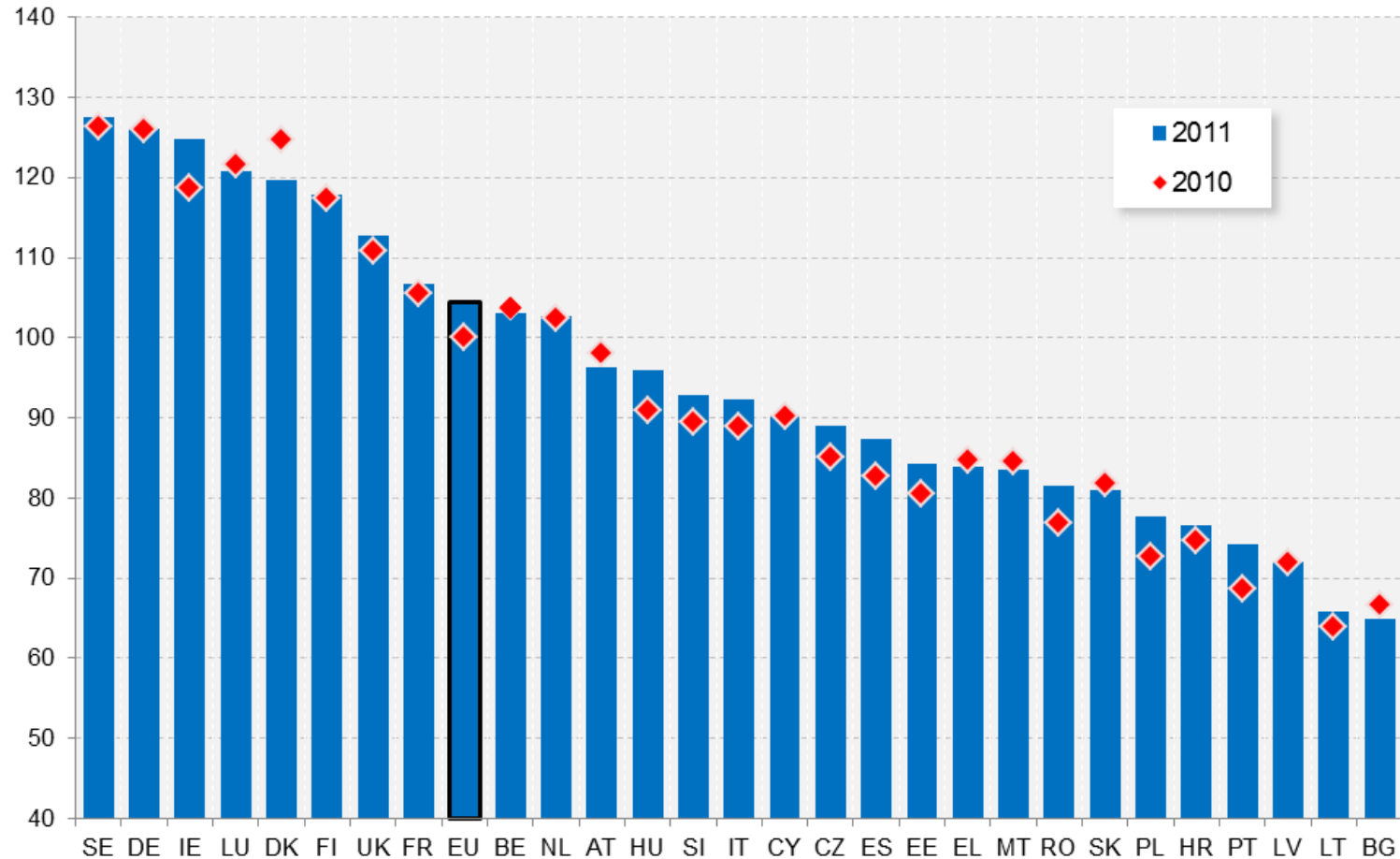
Notes: (1) Real growth was calculated from values in PPS€ at constant 2005 prices and exchange rates.

(2) Foregone tax revenues resulting from R&D tax incentives are not included.

(3) PL: 2008-2009; BE, BG, ES, FR, HR, CY, LV, LT, HU, RO, SE, UK, EU28: 2008-2011.

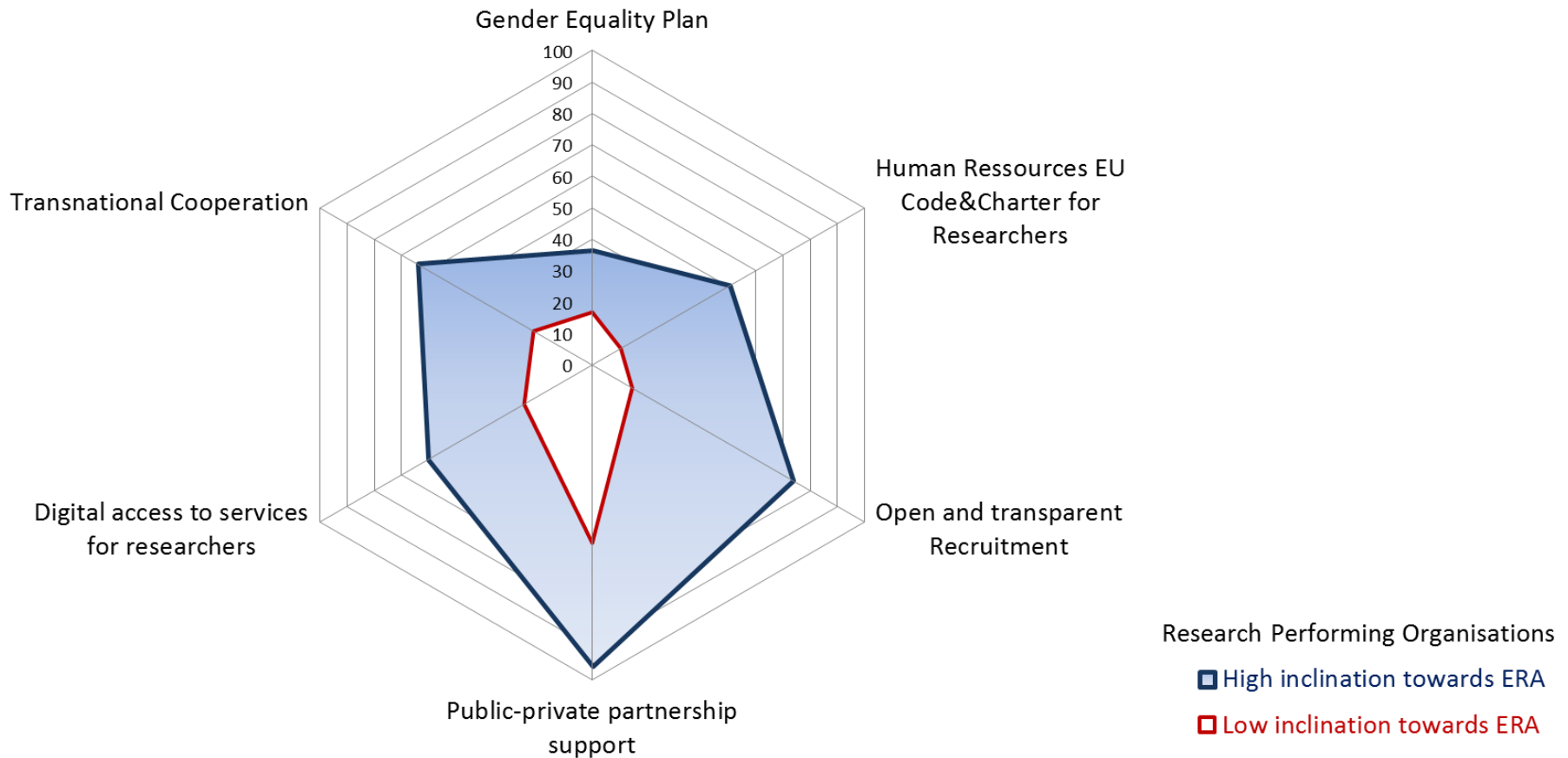
(4) Data for 2012 are provisional.

... and close the innovation gap

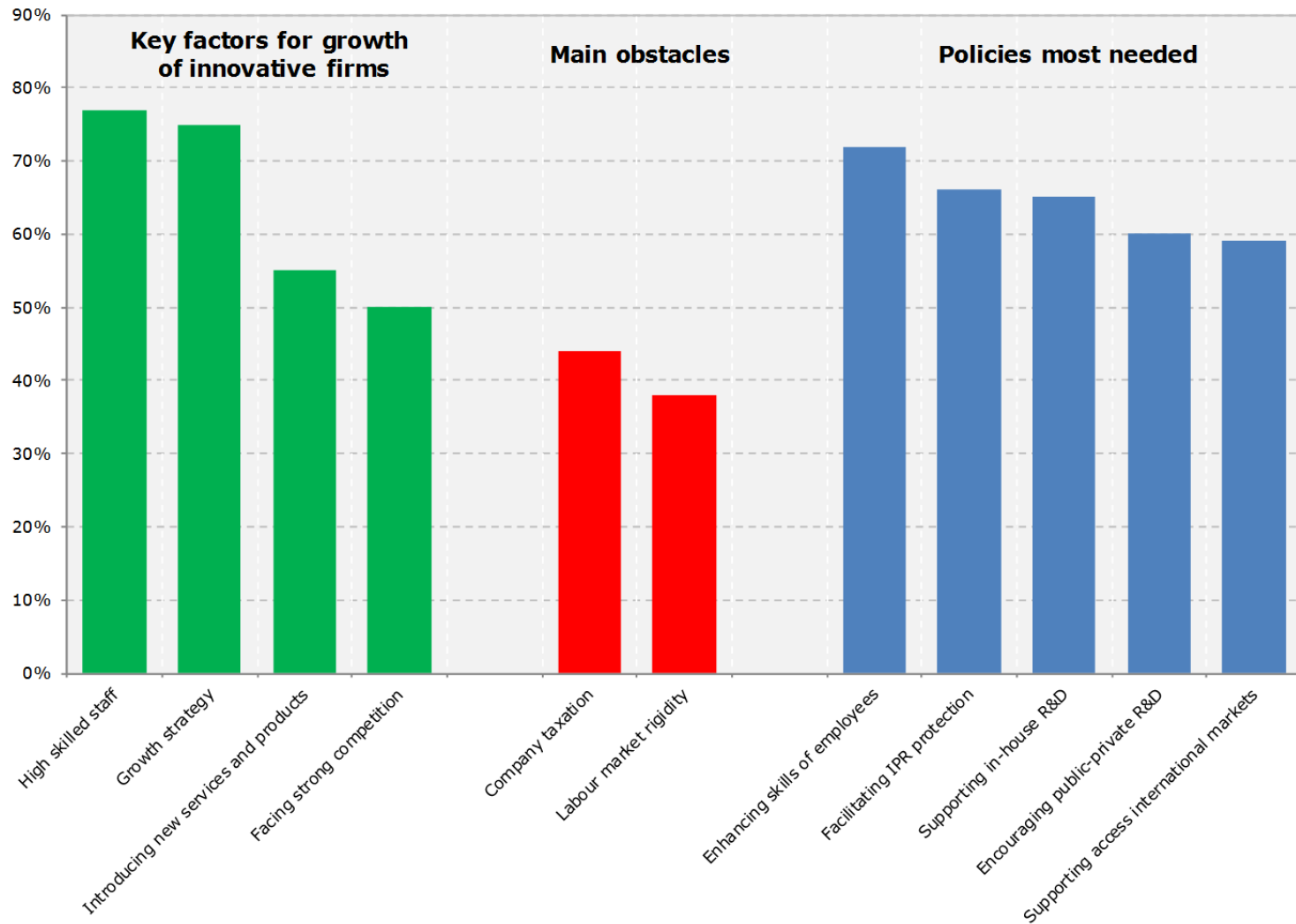


as shown by the new indicator measuring innovation output

Reform our knowledge institutions



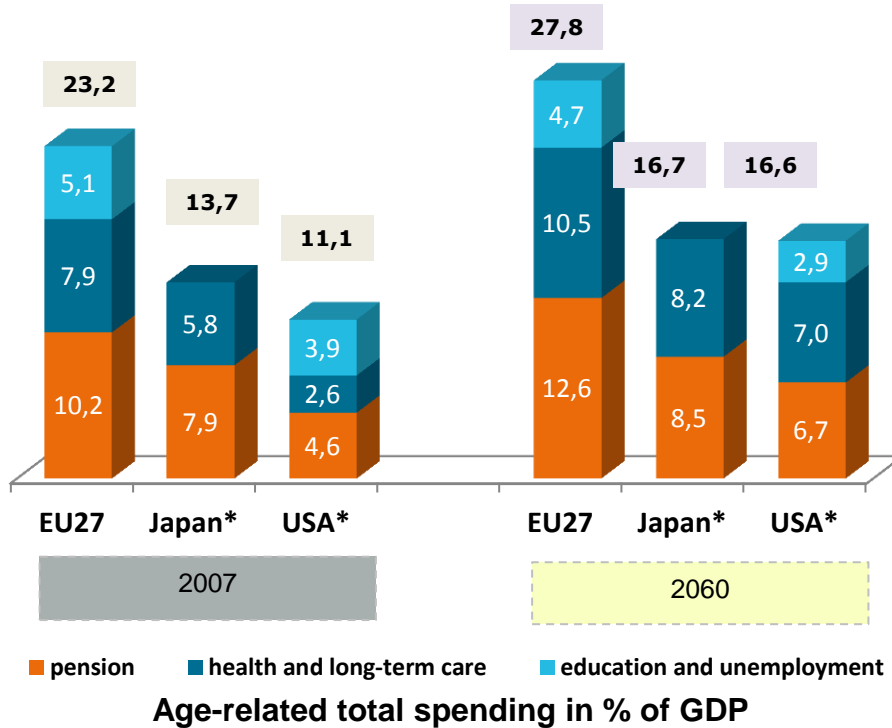
Help European firms to grow fast



Source: DG Research and Innovation - Economic Analysis unit

Data: HGIEsurvey (Empirica, 2013)

Promote markets for innovative solutions



Source: OECD,

National Telecare Development Programme (Scotland, UK)

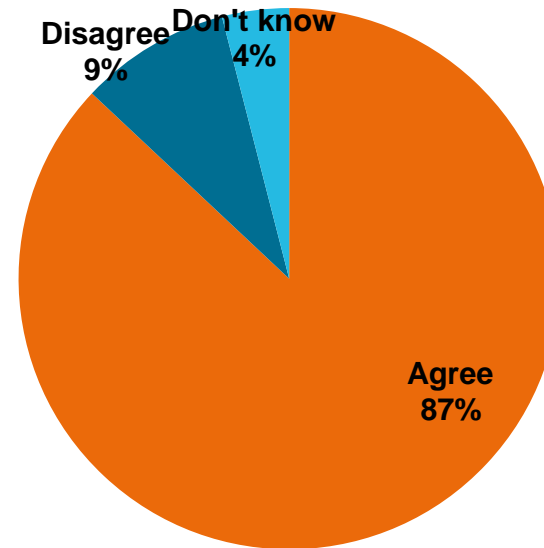
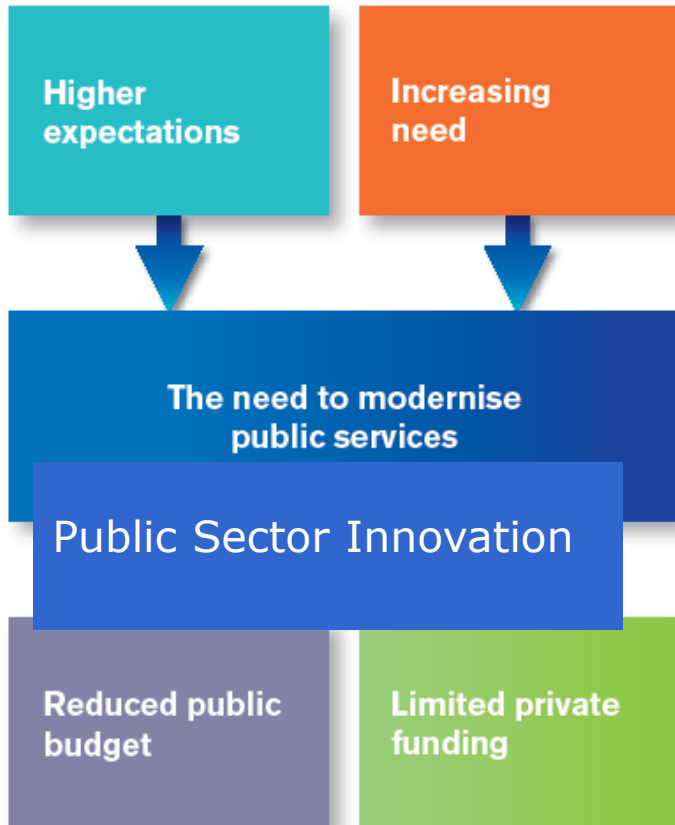
Benefits for the citizens

- 27% thought their health improved
- 87% that their families worried less
- 61% of elderly felt better life quality
- 93% felt safer
- 70% felt more independent

Benefits for care systems

- 92M€ efficiencies (2006-11)
- 2.500 hospital discharges
- 8.700 unplanned admissions less
- Avoided:
 - 109.000 hospital bed days
 - 546.000 care home bed days
 - 444.000 home checks

Use public sector innovation to create growth



Firms think public services must become more innovative to better match business needs.

The public sector accounts for 25% of total employment in EU-27

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Innovation Union Scoreboard (IUS)

- European Union strategy
- Goals:
 - Create an innovation-friendly environment that makes it easier for great ideas to be turned into products and services that will bring the economy growth and jobs
 - Provide a comparative assessment of research and innovation performance in Europe
 - Create smart, sustainable and inclusive growth
 - Make Europe a world-class performer in science
 - Revolutionise the way the public and private sectors work together, notably through Innovation Partnerships
 - Remove bottlenecks – create an internal market for skills, patents, venture capital, innovation procurement and standard setting to foster ideas being quickly implemented on the market

Innovation Union Scoreboard (IUS)

- It tracks a broad range of innovation indicators, the results are used in the Annual Growth Survey, helping countries work out their strengths and the areas they need to focus more on
- Innovation competitiveness report
 - Provides a comprehensive analysis of trends and how things are likely to evolve in each member state
 - Provides a window on how innovative each member state is
 - Shows what each of them needs to work on in order to perform better
- Innovation Union Information and Intelligence System
 - Provides anyone interested with an easy way to find out how innovation is evolving in the EU

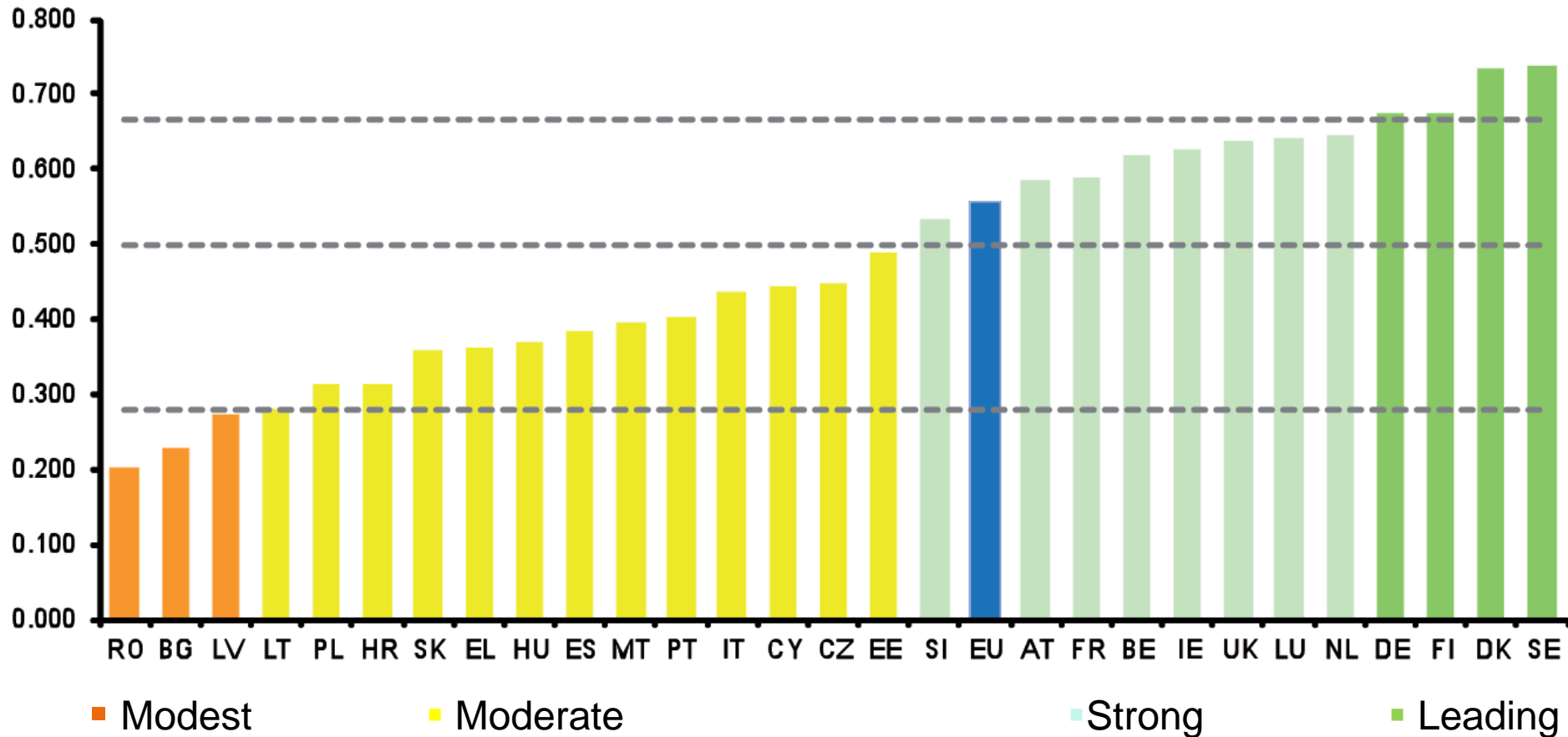
Innovation Union Scoreboard (IUS)

- To further encourage this process of change and to promote a mindset conducive to innovation, the Commission publishes the annual **State of the Innovation Union Report**
- It also brings together all actors at **Innovation Conventions**
- These Conventions meet on the basis of the fundamental belief that major companies, SMEs, the public sector, NGOs and society as a whole need to play their part to make innovation a success

- The Member States (and their regions) are asked to:
 - step up (or at least protect) public budgets in R&D and innovation
 - put in place national strategies for training and attracting talent
 - improve the use of structural funds
 - review the performance of their research and innovation system and identify critical reforms
 - develop common approaches to S&T cooperation with third countries

Innovation Union Scoreboard (IUS)

Figure 3: EU Member States' innovation performance



Source: European Commission – Innovation Union Scoreboard 2015, online:

http://ec.europa.eu/growth/industry/innovation/facts-figures/scoreboards/files/ius-2015_en.pdf

Innovation Union Scoreboard (IUS)

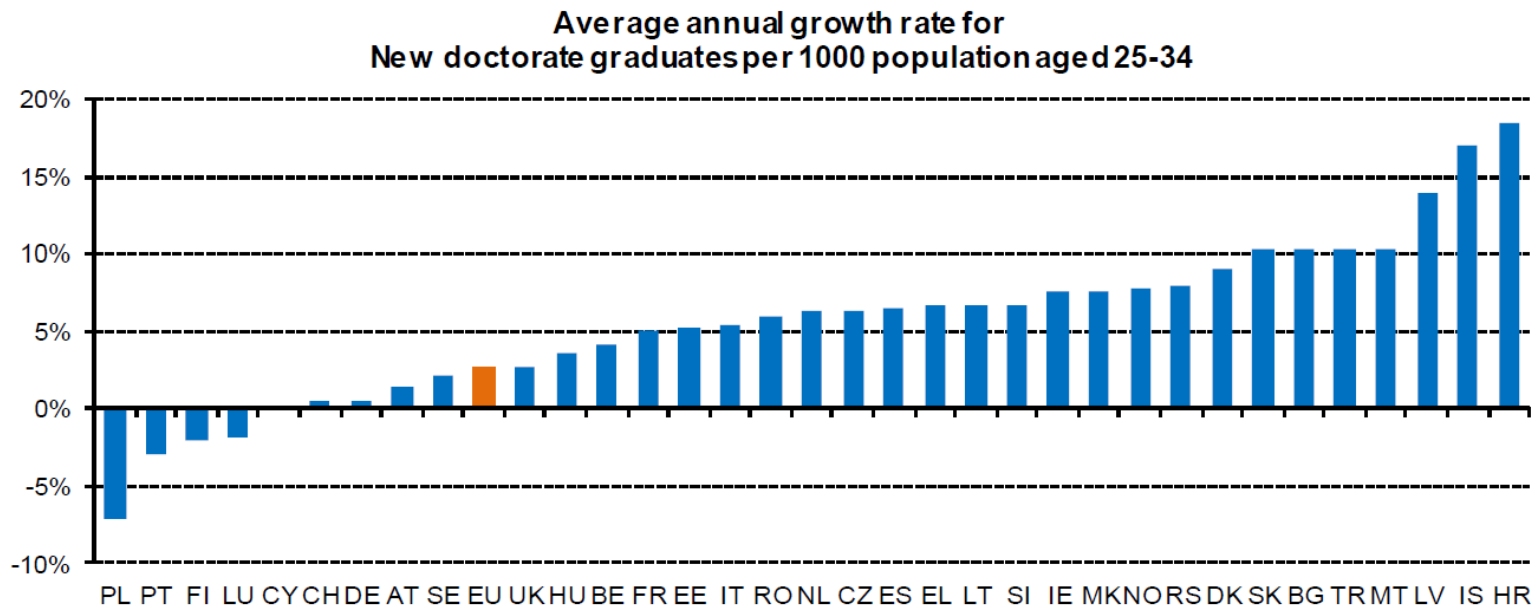
Application by the European Commission

- Comparative assessment of the innovation performance of EU Member States
 - Country-specific analysis, but in comparison
 - Space for innovative competition and pooling as well as country-specific recommendations
- Together with the Regional Innovation Scoreboard, it forms a comprehensive benchmarking and monitoring system of research and innovation trends and activities
- The Scoreboard is a non-binding tool that helps Member States assess the strengths and weaknesses of their research and innovation systems and see where to concentrate efforts to boost their innovation performance

Innovation Union Scoreboard (IUS)

Application by the European Commission

- The IUS analyses the innovation performance of all EU Member States in different areas of interest (e.g. growth rates for new doctorate graduates, see below)
- This allows the Commission to set up country-specific recommendations and benchmarks in various areas of interest



Source: European Commission – Annex H. Performance per Indicator, online:

http://ec.europa.eu/growth/industry/innovation/facts-figures/scoreboards/files/ius-annex-h_en.pdf

Innovation Union Scoreboard (IUS)

Application by the European Commission

- The results of the IUS can also be utilized by the Commission to formulate its Innovation Union policies
- The Commission analyses the results of the IUS and delivers general recommendations to the EU as a whole
- The most recent communication on this topic was published on 10 October 2014 and addresses overall recommendations in areas as follows:
 - Raising the quality of public spending on research and innovation
 - Priority axes for reform (strategy development, quality improvement of resources and funding mechanisms, optimising the quality of public R&I institutions)
 - Commission support for Member State reforms
 - Strengthening the innovation ecosystem

Innovation Union Scoreboard (IUS)

Application by the European Commission

Current examples of impact supported by the results of the IUS:

- Through the Capital Markets Union, the Commission aims to further improve access to finance for businesses, and in particular SMEs
- Strengthening the synergies between the EU's research funding programme Horizon 2020 and Structural Funds will play an important role in stimulating investment levels
- Through the new Policy Support Facility, the Commission will assist Member States in reforming their national research and innovation systems and in leveraging business innovation
- As part of the Single Market Strategy further steps will be presented towards creating a more innovation friendly business environment
- Efforts will be made to make the unitary patent work and for standards to be more conducive to innovation
- Speed up the digital transformation of industry and create a business environment where innovative companies can flourish and obtain easier and affordable intellectual property protection for their innovations

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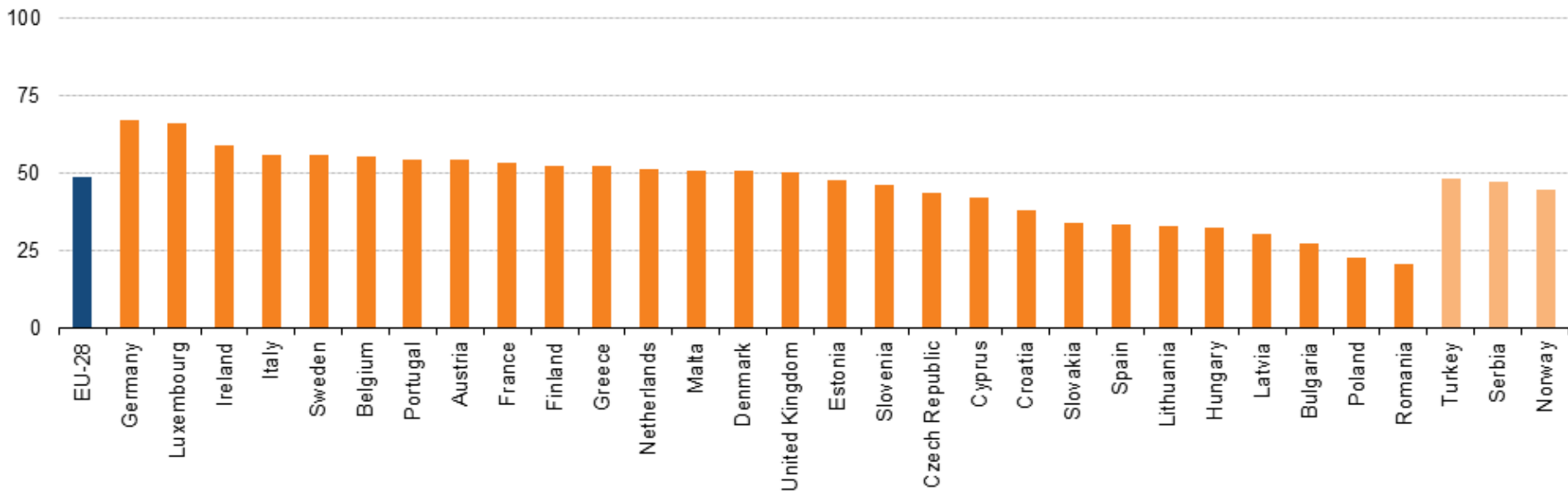
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Community Innovation Survey (CIS)

- Biannual survey conducted by Eurostat
- Provides statistics analysed by types of innovators, economic activities and size classes
- Covers areas such as new or significantly improved goods or services, and the introduction of new or significantly improved processes, logistics or distribution methods
- It also gives information on the characteristics of innovation activity at the enterprise level, thereby creating a better understanding of the innovation process and the effects of innovation on the economy
- Produces a broad set of indicators on innovation activities, innovation spending, effects of innovation, public funding, innovation co-operation, sources of information for innovation, main obstacles on innovation activity and methods of protecting intellectual property rights

Community Innovation Survey (CIS)

Share of innovative enterprises, 2010–12



(*) The survey reference period covers the three years from 2010 to 2012.

Source: Eurostat (online data code: inn_cis8_type)

Community Innovation Survey (CIS)

Share of innovative enterprises by main type of innovation, 2010–12

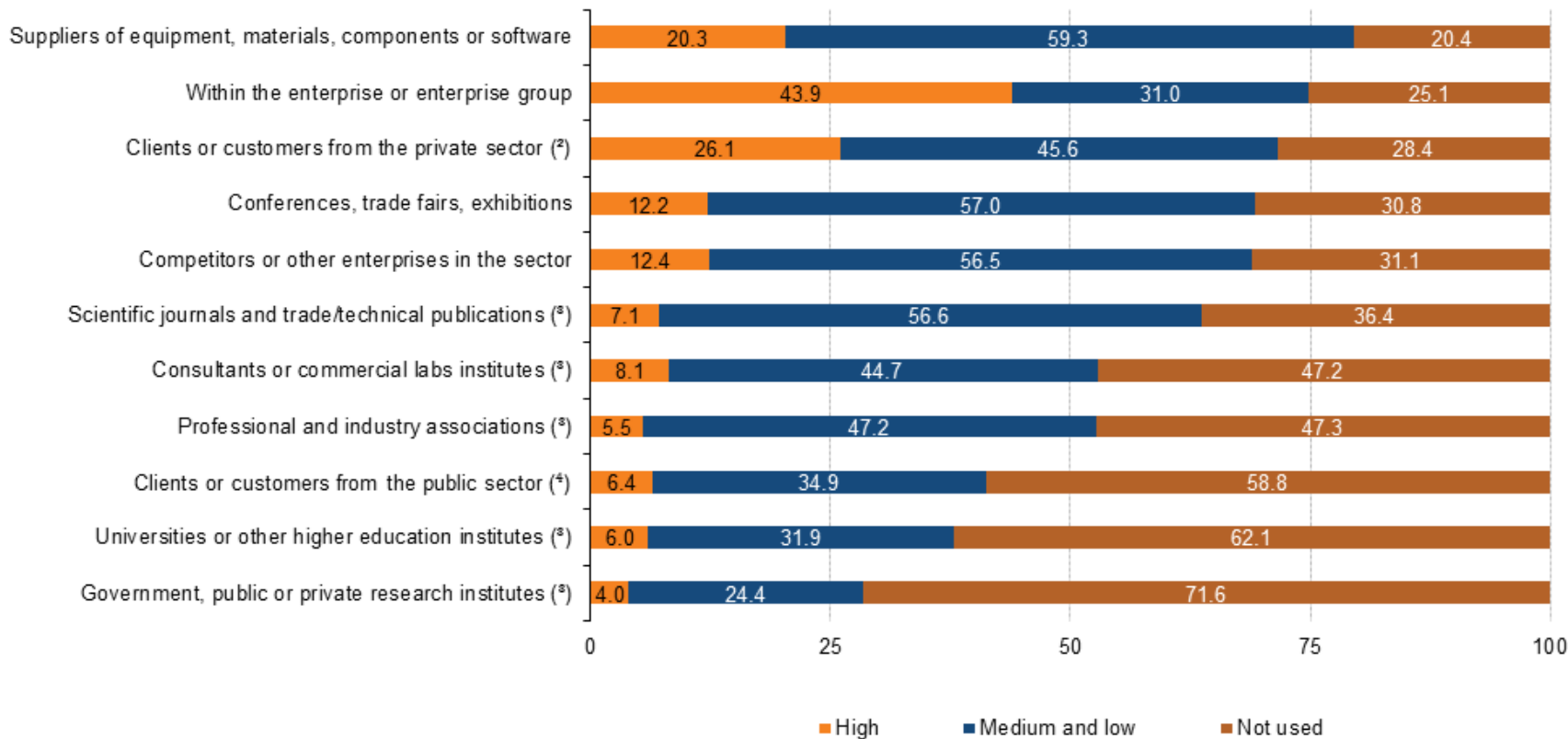
	Innovative enterprises (including enterprises with abandoned / suspended or on-going innovation activities)	Product innovative enterprises	Process innovative enterprises	Organisation innovative enterprises	Marketing innovative enterprises
EU-28	48.9	23.7	21.4	27.5	24.3
Belgium	55.6	31.5	31.1	29.3	21.9
Bulgaria	27.4	10.8	9.3	12.4	14.2
Czech Republic	43.9	25.3	24.0	20.5	22.4
Denmark	51.1	24.8	22.9	32.2	29.4
Germany	66.9	35.8	25.5	32.2	34.4
Estonia	47.6	20.7	23.8	21.7	21.9
Ireland	58.7	27.8	25.9	21.8	35.7
Greece	52.3	19.5	25.6	30.2	36.8
Spain	33.6	10.5	15.1	19.4	13.2
France	53.4	24.2	24.1	34.2	25.4
Croatia	37.9	16.4	19.0	22.9	23.5
Italy	56.1	29.1	30.4	33.5	31.0
Cyprus	42.1	20.9	28.2	26.2	29.5
Latvia	30.4	10.4	12.7	16.9	16.5
Lithuania	32.9	11.6	13.1	17.5	19.3
Luxembourg	66.1	30.3	32.8	46.8	32.4
Hungary	32.5	10.6	8.3	16.5	19.7
Malta	51.1	23.9	26.4	34.7	32.6
Netherlands	51.4	31.9	25.9	27.3	23.2
Austria	54.4	26.6	28.7	36.4	29.5
Poland	23.0	9.4	11.0	10.4	10.6
Portugal	54.6	26.0	33.5	32.8	32.8
Romania	20.7	3.4	4.6	14.1	13.8
Slovenia	46.5	23.6	22.5	26.3	28.5
Slovakia	34.0	14.4	13.5	18.6	19.3
Finland	52.6	31.0	29.3	29.7	26.5
Sweden	55.9	31.5	23.9	25.3	30.4
United Kingdom	50.3	24.0	14.1	34.2	16.8
Norway	44.7	19.1	11.9	21.7	23.2
Serbia	47.5	24.5	22.0	32.6	32.2
Turkey	48.5	17.7	20.4	31.7	34.7

(*) The survey reference period covers the three years from 2010 to 2012.

Source: Eurostat (online data code: inn_cis8_type)

Community Innovation Survey (CIS)

Sources of information used for product and or process innovations by degree of importance, EU-28, 2010–12



(*) Excluding the Czech Republic, Denmark, Ireland, France, Latvia and the United Kingdom. The survey reference period covers the three years from 2010 to 2012.

(*) Excluding also Spain.

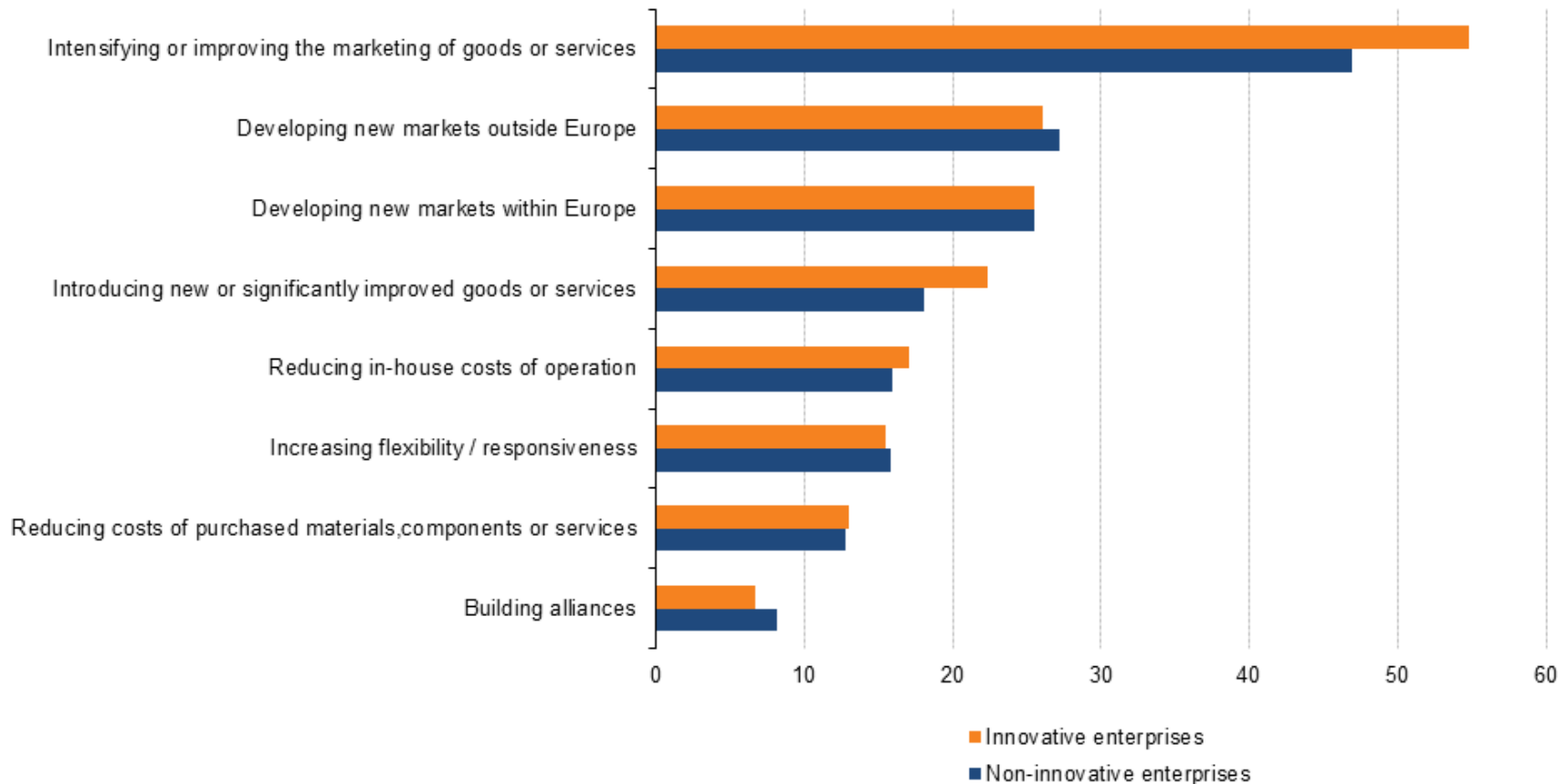
(*) Excluding also Sweden.

(*) Excluding also Spain and the Netherlands.

Source: Eurostat (online data code: inn_cis8_sou)

Community Innovation Survey (CIS)

Highly important strategies in innovative and non-innovative enterprises, EU-28, 2010–12

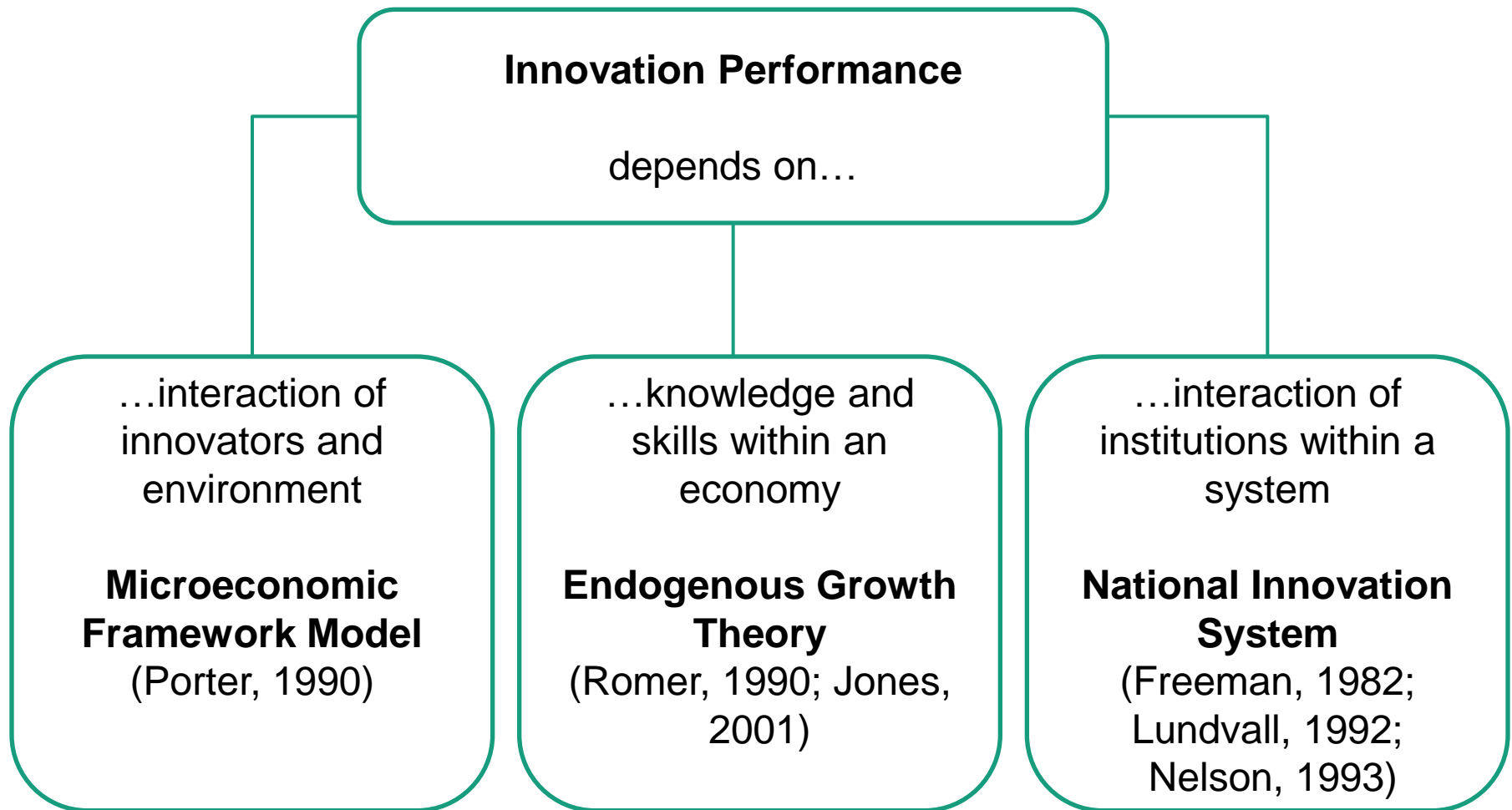


(*) Excluding Czech Republic, Denmark, Ireland, Spain, Latvia, Luxembourg, Austria, Finland and the United Kingdom. The survey reference period covers the three years from 2010 to 2012.
Source: Eurostat (online data code: inn_cis8_strat)

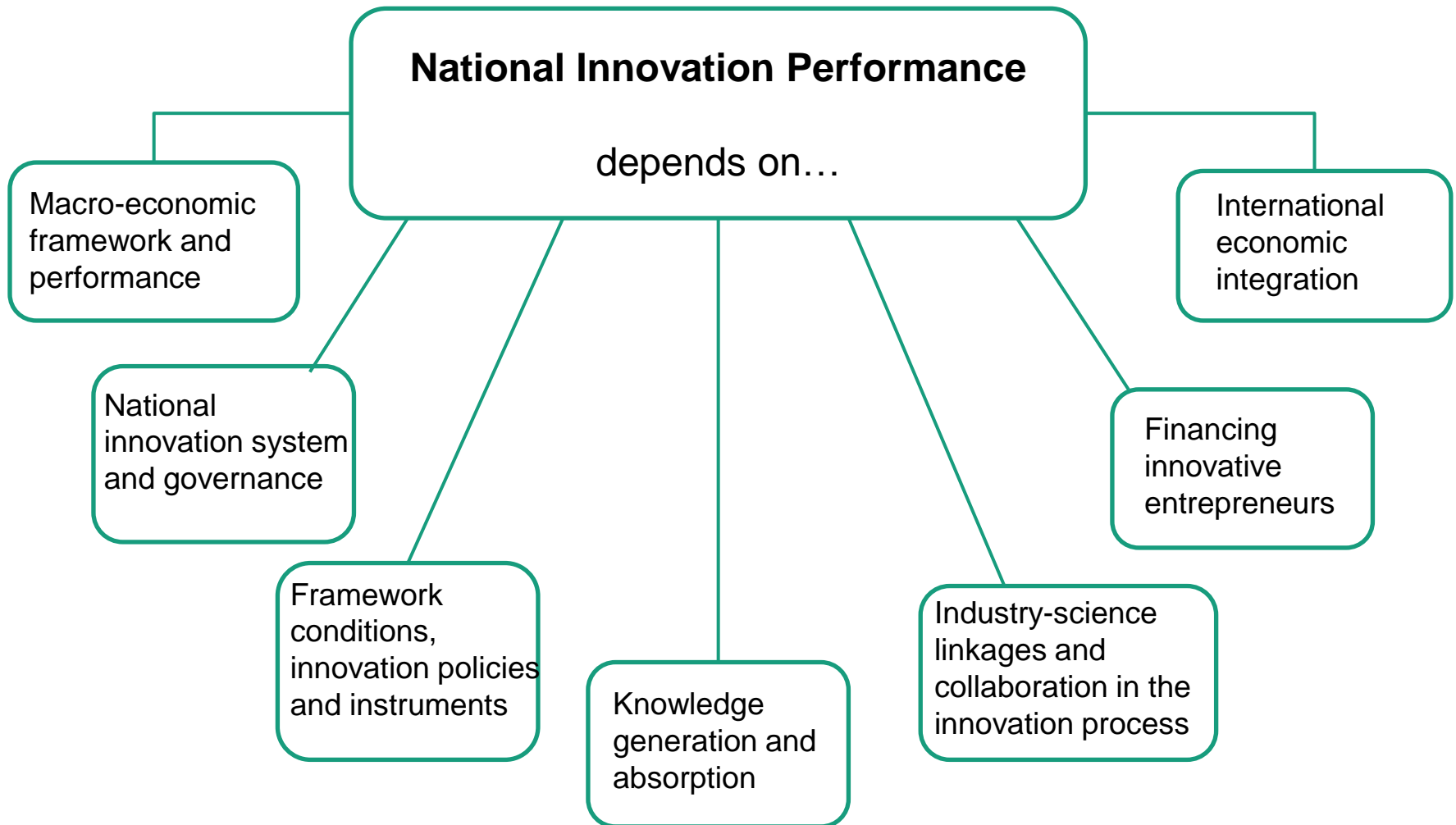
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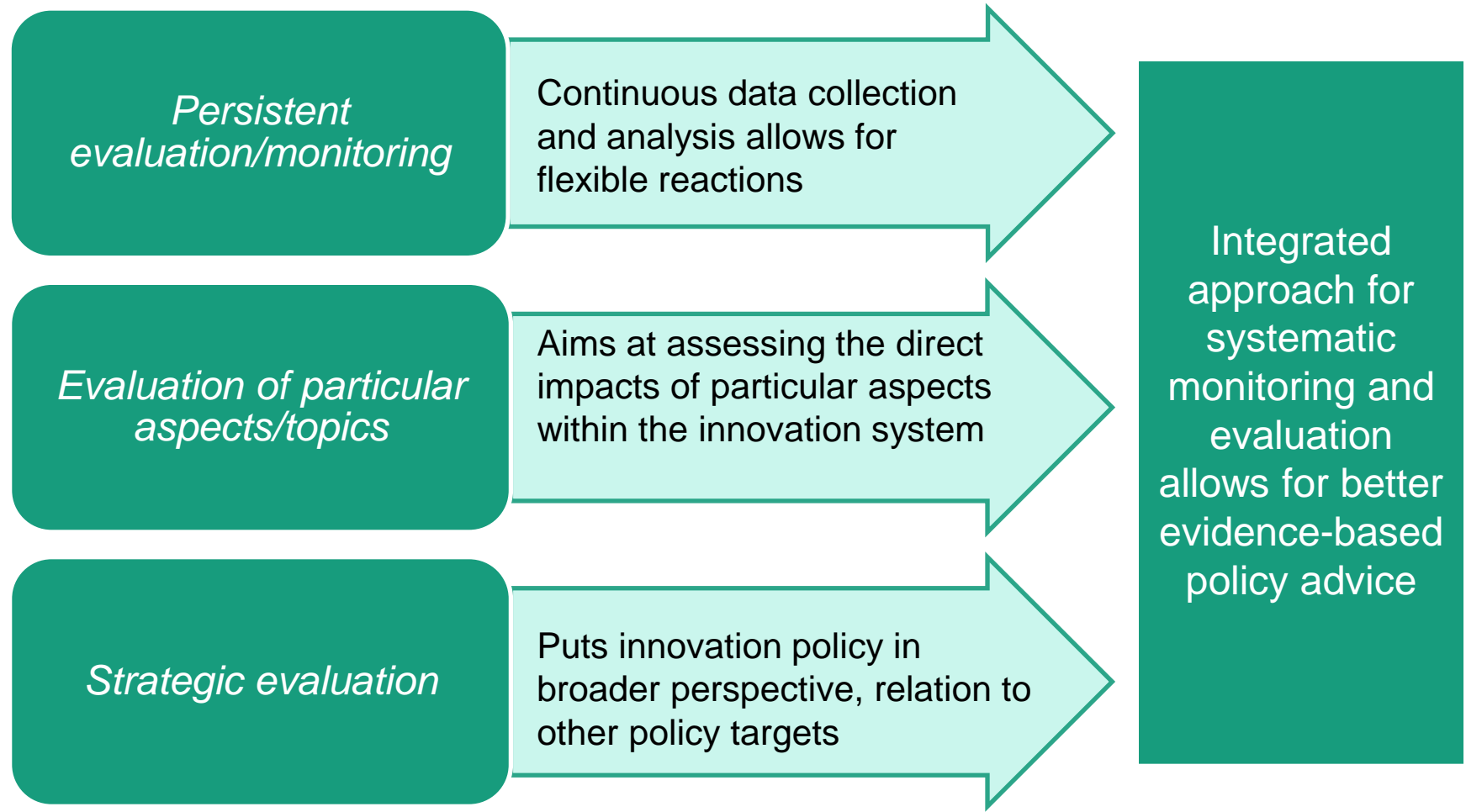
Reminder: the theoretical framework for the evaluation of innovation performance



The current IPR framework for monitoring and implementation



Towards an appropriate framework for the evaluation of Innovation Performance



Thank you very much for your attention!



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