



# Western Balkans Steering Platform on Research and Innovation

**Competitiveness in South East Europe: 2018 – Science,  
Technology and Innovation Dimension**

25 June 2018

Brussels

# OECD South East Europe Division

## SEE Division

- The **South East Europe division** regional programme was created in 2000 under the auspices of the Stability Pact. The **mandate, signed by nine governments recognised private-sector development and international co-operation as cornerstones for the revitalisation of the region.**
- Since then, **governments, business leaders and civil society have worked together in co-operation with the OECD to meet economic challenges.**
- The **SEE regional programme has produced actionable policy reports with recommendations and supported the region to design and implement reforms to foster private sector development.**

## Competitiveness Outlook

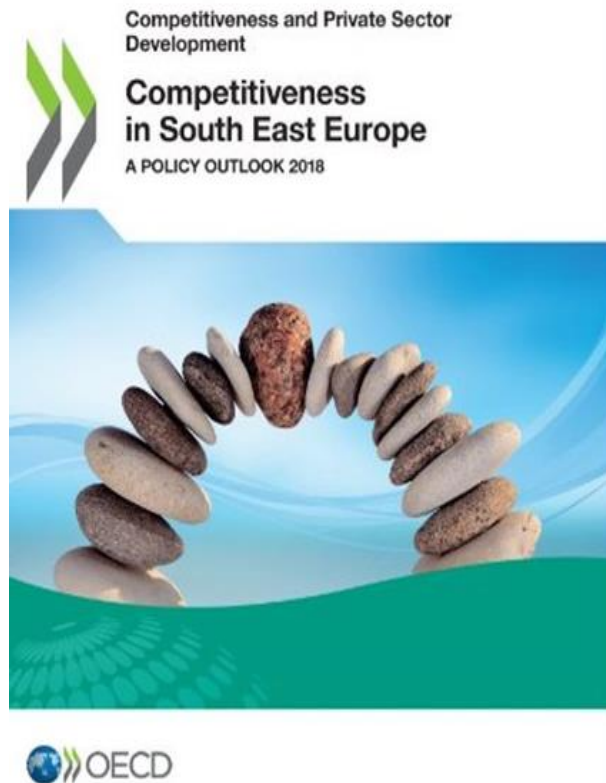
- The publication series **Competitiveness in South East Europe: A Policy Outlook** offers one of the most comprehensive assessments of policies critical to competitiveness in South East Europe.

## Economic Reform Programmes

## Small Business Assessment



# The Competitiveness Outlook: A tool for monitoring progress and building competitive economies



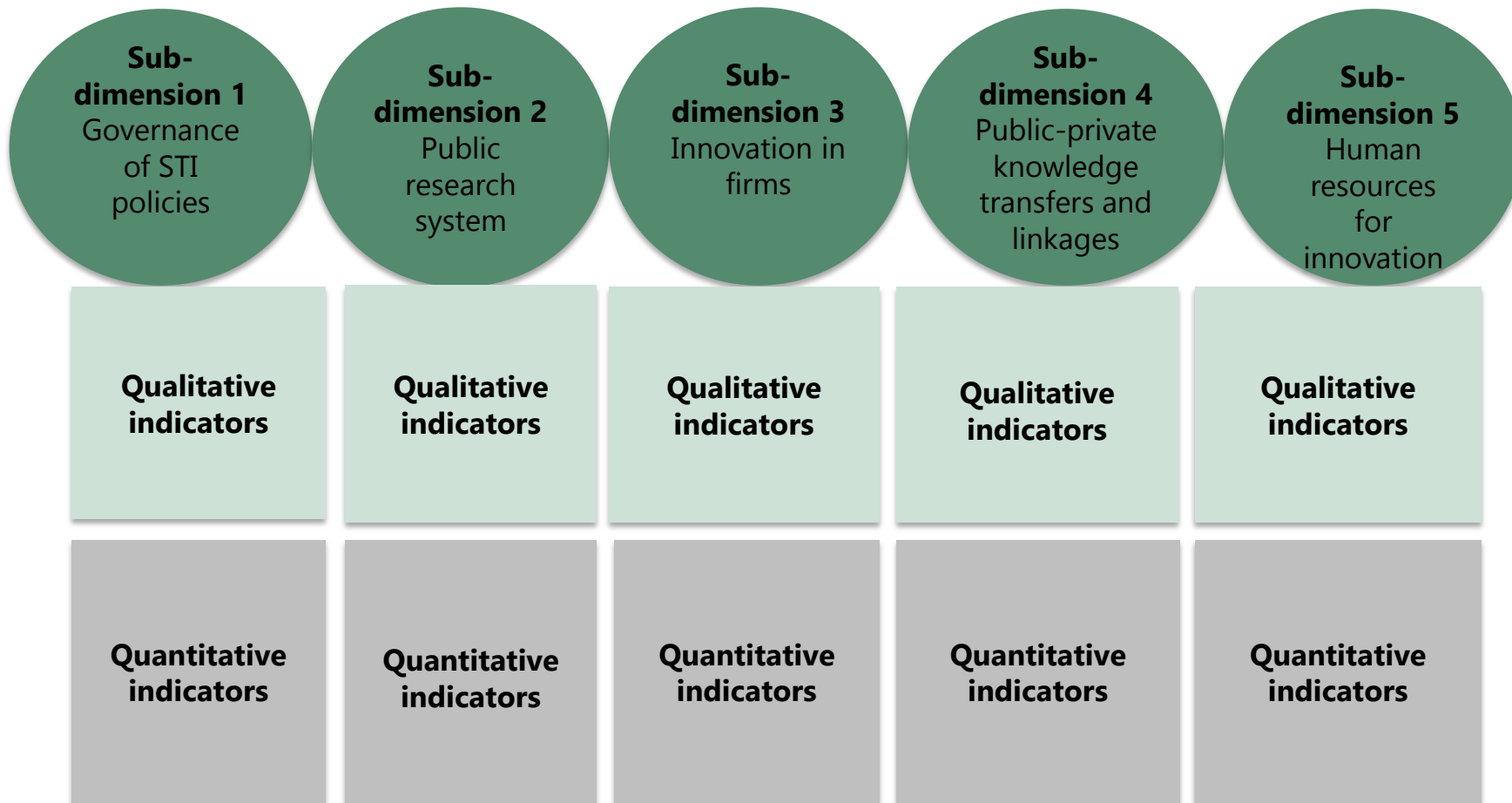
- The Competitiveness Outlook was released in **April 2018**.
- Assesses reform progress across **17 policy** areas key to competitiveness.
- Focuses on six SEE economies: **Albania, Bosnia and Herzegovina, the Former Yugoslav Republic of Macedonia, Kosovo\***, Montenegro and Serbia.
- Comprised of **more than 600 quantitative and qualitative indicators**.
- **Benchmarks performance** between peer economies and OECD good practices.
- Provides guidance for further **policy reforms and change management tool**.

*\*This designation is without prejudice to positions on status, and is in line with United Nations Security Council Resolution 1244/99 and the Advisory Opinion of the International Court of Justice on Kosovo's declaration of independence.*



# Science, technology and innovation assessment framework

## Outcome indicators



# Example – Sub-dimension 3: Innovation in firms

## Sub-dimension 3 Innovation in firms

### Qualitative indicators

1. Innovation promotion
2. Financial support: competitive grants for research and innovation in businesses
3. Fiscal incentives for RDI
4. Institutional support: incubators and accelerators
5. Institutional support: technology extension services
6. Public procurement for innovation

### Quantitative indicators

1. Business expenditure on R&D (% of GDP)
2. Score SMEs introducing innovations (EIS)
3. Motivational index (Global Entrepreneurship Monitor)
4. Non R&D innovation expenditures (EIS)
5. Number of firms introducing a new product/service (EIS)
6. Number of firms introducing a process innovation (EIS)



# The assessment was based on two OECD projects

## OECD Reviews of Innovation Policy



- The **Reviews of Innovation Policy** was a Comprehensive analysis of the **national innovation systems** - with a focus on the **role of government policy**.
- **Systemic perspective** covering business sector, higher education / public research institutions, government and how they interact.
- **25 countries, 11 non-member countries.**

## The Innovation Imperative



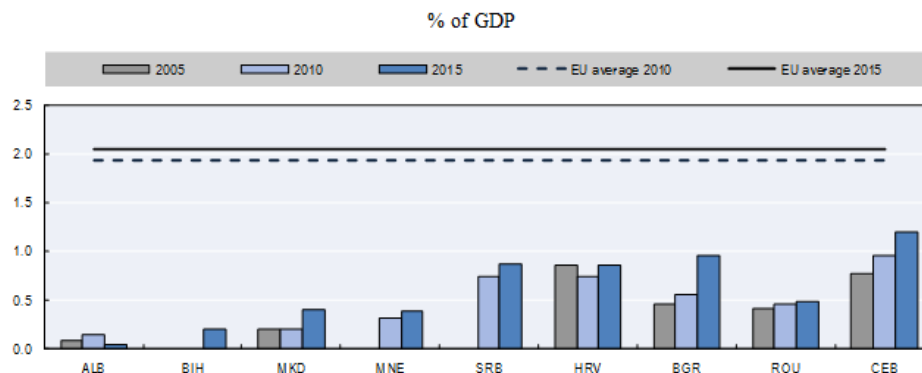
- The **Innovation Imperative** covered **five** concrete areas for action:
  - Effective skills strategies.
  - A sound, open and competitive business environment.
  - Sustained public investment in an efficient system of knowledge creation and diffusion.
  - Increased access and participation in the digital economy.
  - Sound governance and implementation.



# Sub-dimension 1: Governance of STI policies

- **Holistic policy frameworks for STI are emerging, but inter-ministerial co-ordination is still a challenge.**
  - + MKD, MNE and SRB have adopted holistic innovation strategies.
  - Implementation remains fragmented between Ministries in charge of science and technology, and those for economy.
- **International co-operation is progressing, however international technology transfer is still lacking.**
  - + SEE economies are committed to participation in European programmes: Horizon2020, EUREKA, COSME, and others.
  - Policy action is largely reactive, rather than proactive and expenditure on R&D is below the EU average.
- **Gross domestic expenditure on R&D is below the EU average.**

Figure 9.9. Gross domestic expenditure on R&D (GERD)



Note: Data for Kosovo are not available. HRV – Croatia; BGR – Bulgaria; ROU – Romania; CEB – Central Europe and the Baltics (Bulgaria, Croatia, the Czech Republic, Estonia, Hungary, Latvia, Lithuania, Poland, Romania, the Slovak Republic and Slovenia).

Source: Government statistical offices and ministries as part of the *Competitiveness Outlook* assessment 2016-17; Eurostat (2017), *Gross Domestic Expenditure on R&D (GERD)* (dataset), [http://ec.europa.eu/eurostat/web/products-datasets/-/t2020\\_20&lang=en](http://ec.europa.eu/eurostat/web/products-datasets/-/t2020_20&lang=en).



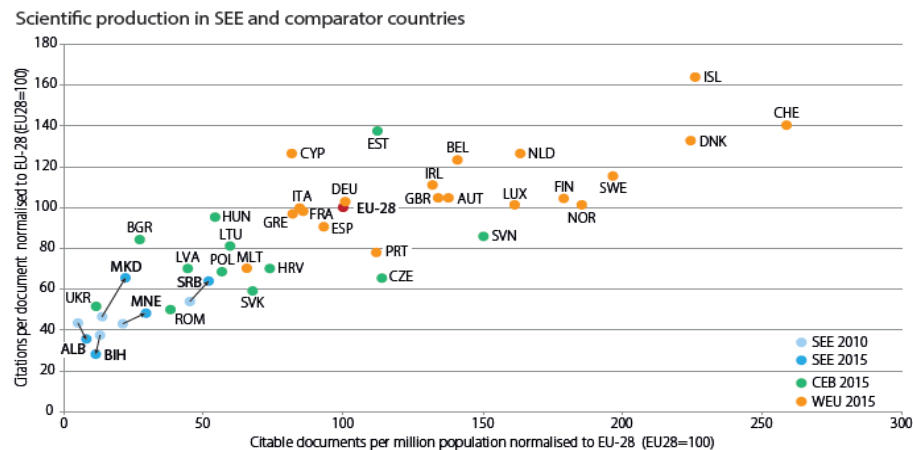
# Sub-dimension 2: Public research system

- **The financing of research is insufficient overall.**

- ⊕ Competitive funding has been introduced to varying degrees (from <1% in ALB to 100% in SRB).
  - ⊖ Sustainability of competitive grants is not ensured, and block funding does not take into account performance.
  - ⊖ Scientific production in SEE economies is below EU average.

- **Governance frameworks of higher education institutions (HEI) and public research organisations (PRO) are in place, but links to private sector are missing.**

- ⊕ Composition of Governing boards mostly ensure minority representation of the government; interestingly in Albania government takes over the majority if the University generates less than 50% of its budget from fees.
  - ⊖ There is no participation of the private sector on the Governing boards of HEI's and PRO's.



Note: WEU – Western Europe; EU-28 – the 28 EU Member States.

Source: Scimago (2017), Country Rankings (dataset), [www.scimagojr.com/countryrank.php](http://www.scimagojr.com/countryrank.php); World Bank (2017), World Development Indicators (database), <http://databank.worldbank.org/data/reports.aspx?source=world-development-indicators&preview=on#>.





# Sub-dimension 3: Innovation in firms

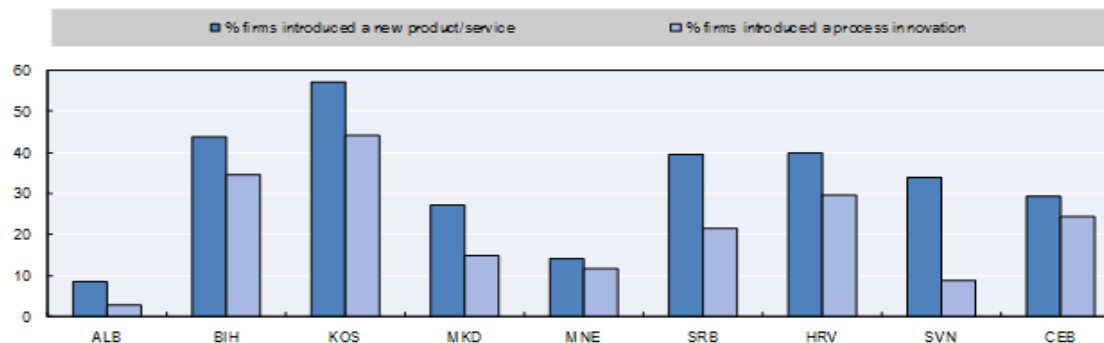
- **Support to technological firms and start-ups is progressing.**

- **+** Innovation funds in SRB and MKD have implemented successful grant schemes according to good practice.
- **-** Technology extension services focused on skill upgrading do not exist, and cluster programmes are declining.

- **Public procurement is insufficiently leveraged to boost innovation.**

- **+** Governments are progressively introducing 'most advantageous offer' as a criterion for public procurement.
- **-** None of the SEE economies has introduced functional requirements or specific incentives for innovation (e.g. specific points for innovative solutions).

Figure 9.17. Firms introducing innovations in SEE (2016)



Note: HRV Croatia; SVN Slovenia; CEB – Central Europe and the Baltics (Bulgaria, Croatia, the Czech Republic, Estonia, Hungary, Latvia, Lithuania, Poland, Romania, the Slovak Republic and Slovenia).

Source: EC (2017a), *European Innovation Scoreboard 2017*, [http://ec.europa.eu/growth/industry/innovation/facts-figures/scoreboards\\_fr](http://ec.europa.eu/growth/industry/innovation/facts-figures/scoreboards_fr).



# Sub-dimension 4: Public-private knowledge transfers and linkages

- **Some pioneering initiatives are underway, but research-industry co-operation remains weak.**

- **+** Montenegro is setting up a Science and Technology Park.
- **-** Voucher schemes have mostly failed or are underfinanced, co-operative grants are non-existent (except in Serbia) and professional mobility between academia and private sector is not supported.

- **Regulatory incentives for academia-business co-operation remain to be developed.**

- **+** The Serbian Law on innovation activities grants the inventor at a PRO or HEI 50% of profits from the patent.
- **-** Little formal regulations exist which encourage business-academia linkages.

## **Good Practice: An Innovation voucher scheme in Poland**

The Polish Agency for Enterprise Development (PARP) started implementing a voucher scheme in 2008, with the objective of initiating collaboration between entrepreneurs and academia. The voucher targets micro, small and medium-sized enterprises, and can only be used for products or process development by a research institution.



# Sub-dimension 5: Human resources for innovation

- **Human capital is high, but affected by brain drain.**
  - ⊕ There is a relatively widespread provision of ICT training (information and communications technologies).
  - ⊖ Limited investment in R&D means there are a low number of researchers in the SEE economies.
  - ⊖ Emigration rates of highly educated individuals exceeds 30% of tertiary graduates compared to 19% in the CEB.
- **Intellectual property rights for business-academica co-operation.**
  - ⊕ Serbian Innovation Law is a positive step, but Serbia's next step should be to make academics aware of the law in order to encourage them to patent their discoveries.
- **Encourage greater mobility of researchers between the public and private sectors.**
  - ⊖ Lack entrepreneurial leave of absence.



# Policy recommendations and way forward

## **Increase and consolidate financial support for research and development.**

- ✓ Economies who have adopted innovation strategies should focus on implementation and sustainable financing.

## **Place more emphasis on technology diffusion and absorption policies.**

- ✓ Cross border technology transfer to SMEs.

## **Use procurement to encourage innovation**

- ✓ Enhance competition and prevent bid rigging.

## **Develop a structured approach to create links between business and academia.**

- ✓ Introduce private-sector representation on the governance boards of HEIs and public research organisations.

## **Provide incentives for individuals to unleash their creative potential.**

- ✓ Create schemes to promote mobility between the public and private sectors.
- ✓ A legal guarantee to researchers of participation in profits from intellectual property rights.

## **Make better use of the SEE economies' highly educated diaspora and tackle brain drain.**

- ✓ 30% of highly educated people have left the region.

## **Improve the creation of STI-related statistics.**

- ✓ Economies collect very few statistical indicators relevant to STI.



**Thank you for your kind attention!**

**For further information please contact**

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