

Barriers: the Bulgarian case

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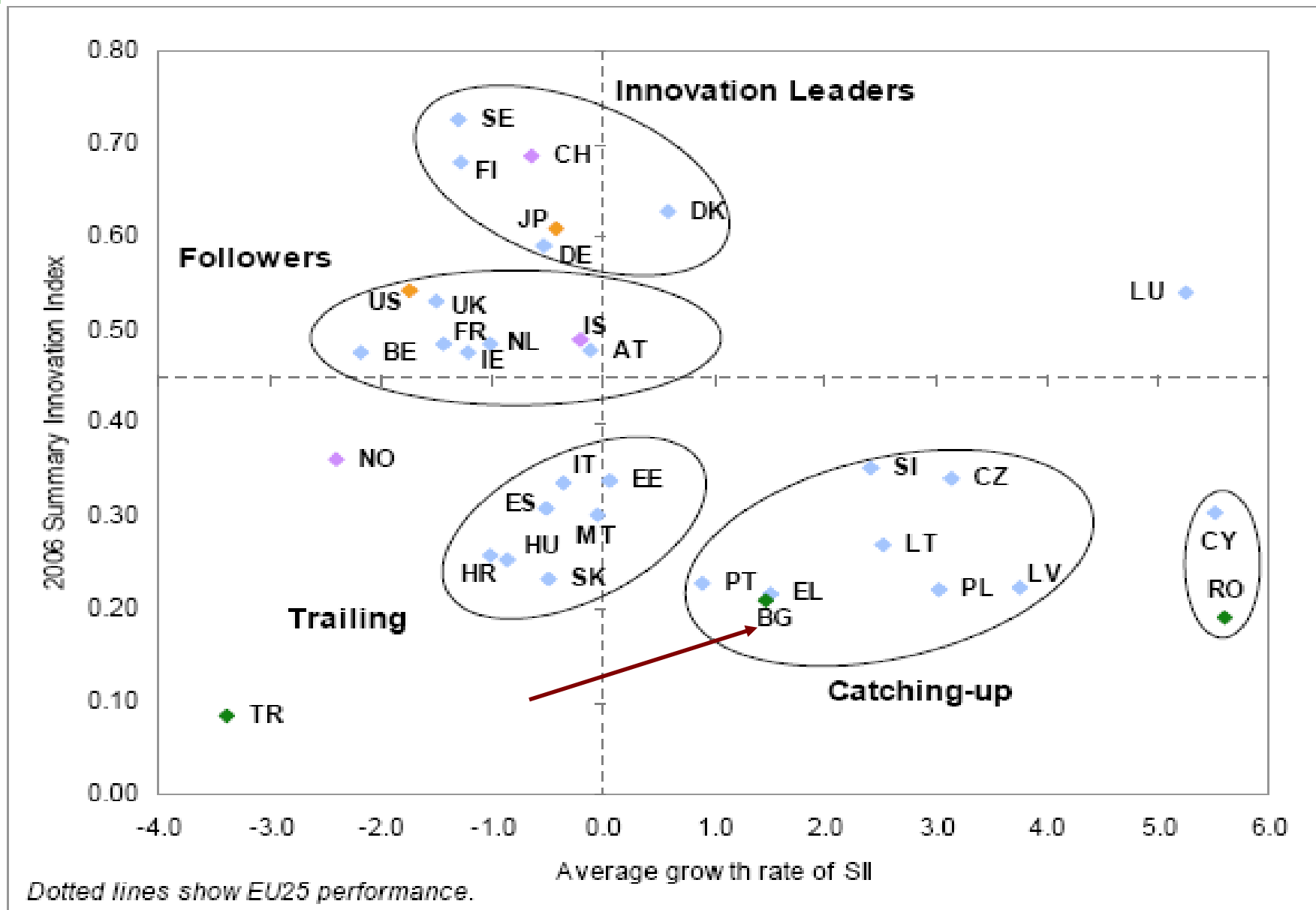


European framework for career and mobility of researchers

- Building the ERA
 - knowledge triangle – education, research and industry
- Researchers in the centre
 - Mobility strategy - EURAXESS services and jobs
 - Career of researchers – Charter for researchers and Code of conduct for recruitment of researchers
 - European labor market – ‘Scientific visa’ package
 - FP7 People – funding of researchers’ mobility and career
 - **European partnership for researchers**
- Knowledge transfer and IPR - Code of practice for universities and other research organizations

Innovation index and trends in Europe

Source: European Innovation Scoreboard 2006



Main weaknesses in Bulgaria (European Innovation Scoreboard)

- weak **links** between science and businesses
- not sufficient measures to develop **innovation infrastructure**, support services, technological brokerage, intermediary services, etc.
- not involvement of **university students** in scientific and technological activities
- **low innovative culture** and weak innovative culture of businesses
- low level of **investment in new products** and processes
- slow implementation of **measures** and not systematic and transparent evaluation, etc.

Knowledge creation in Bulgaria

among 145 countries:

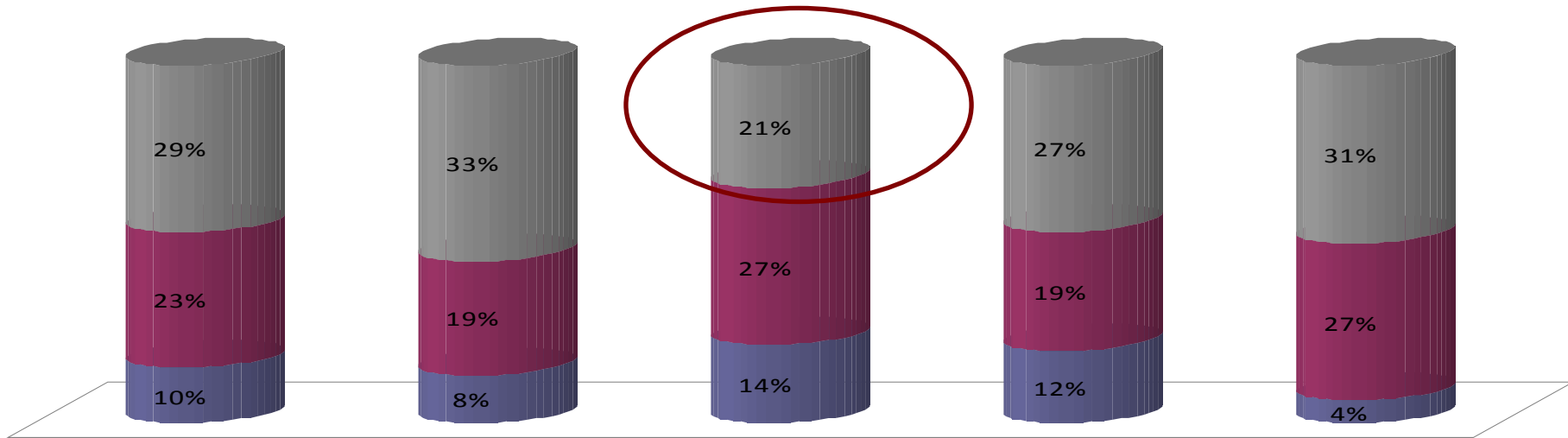
- 39 place in Physics
- 45 in Mathematics and Chemistry, growing publications and their citation by other researchers
- 47 in Computer Science and Engineering, with decreasing from 1995 to 2003 publications and their citations
- **very low commercialization of research results**

Type of academia-industry collaboration in Bulgaria

Consultations	17%
Training, seminars, conferences	13%
Organization of student, doctoral, etc. research practices	11%
Assisting the management of business processes	8%
Studies of the effectiveness of technologies/products/services	7%
Creation of new technologies	6%

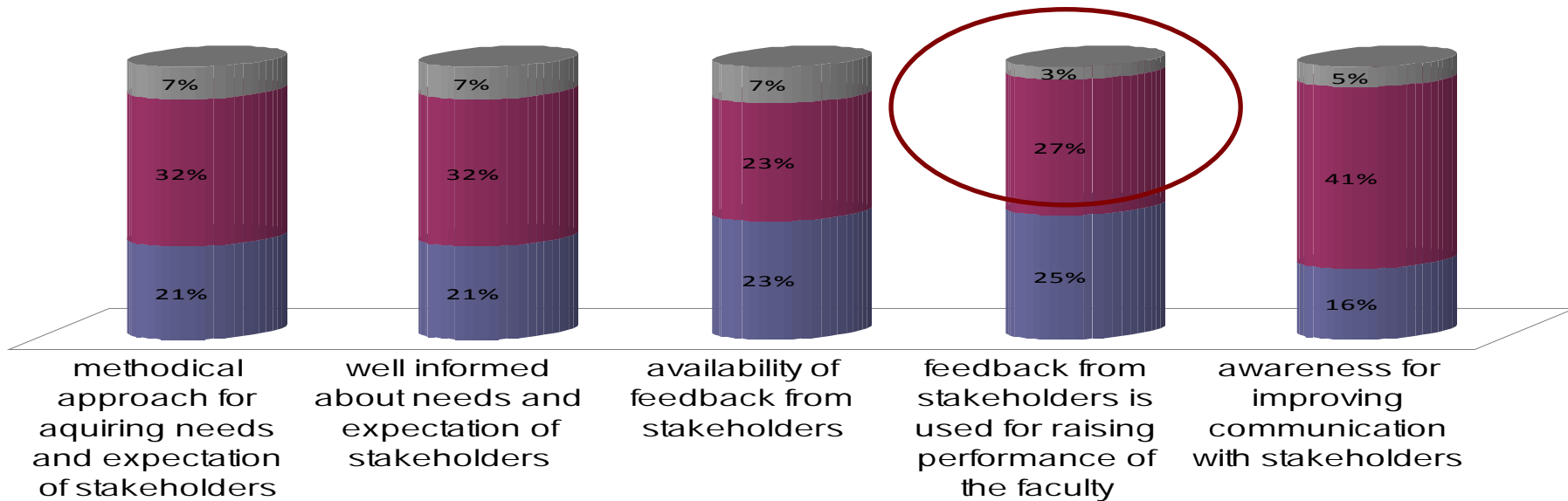
FA collaboration with stakeholders

■ FA Weak ■ FA Average ■ FA Strong



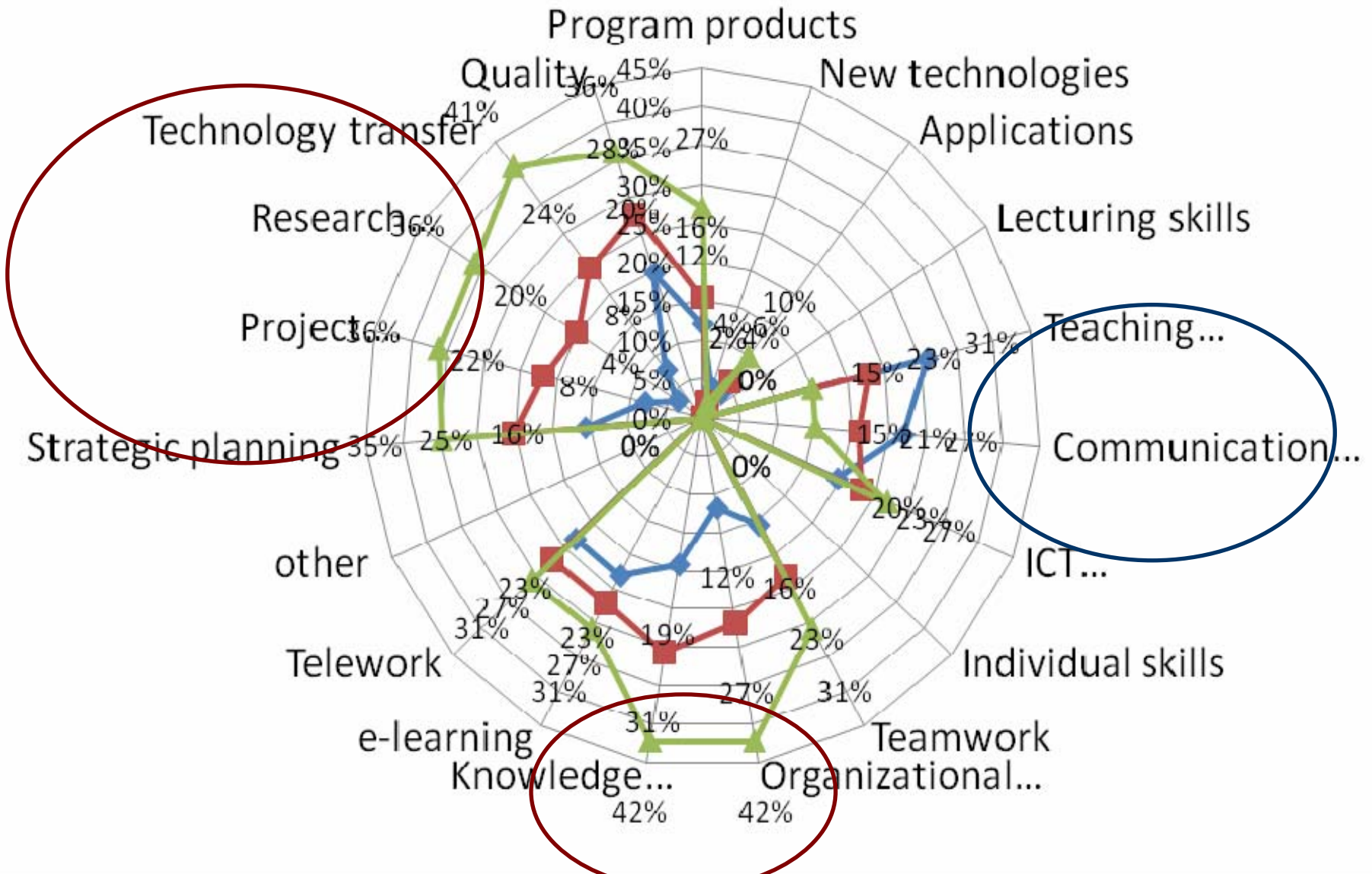
FMI collaboration with stakeholders

■ FMI Weak ■ FMI Average ■ FMI Strong

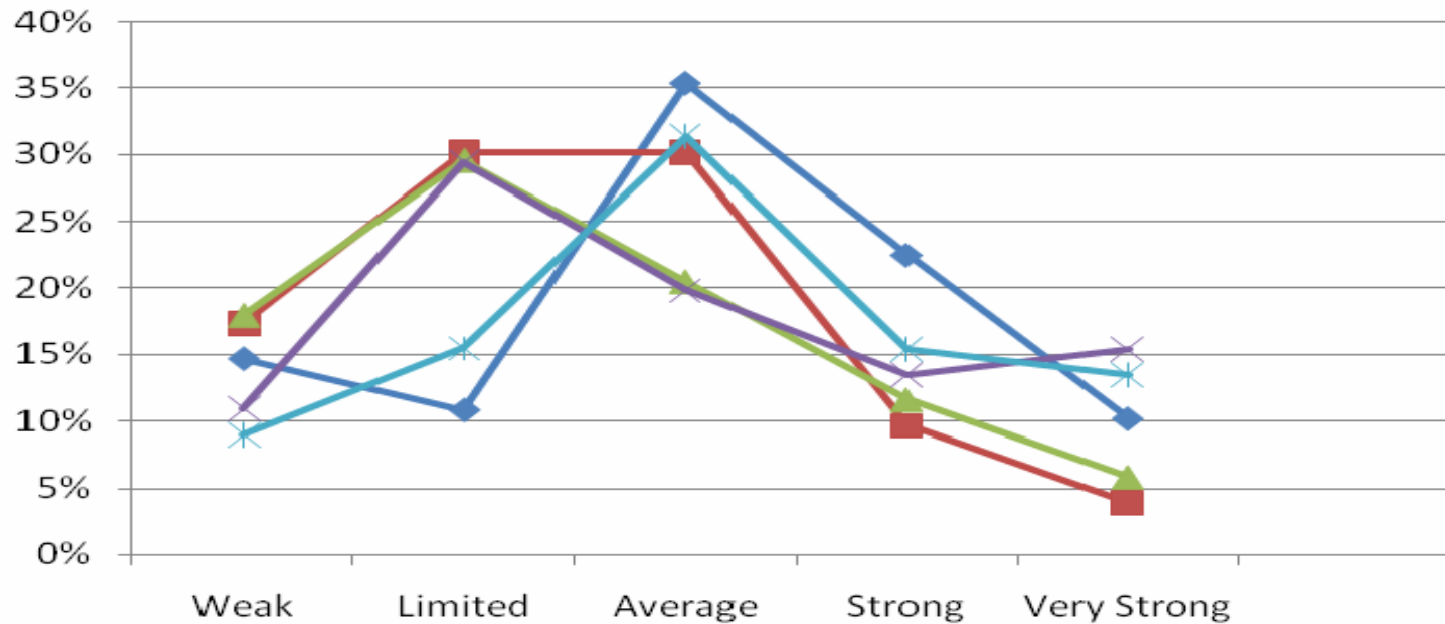


Needs for additional training

◆ Weak
 ■ Average
 ▲ Strong



Strategic planning



◆ Formal process for planning learning activities

■ Formal process for planning research and innovation activities

▲ Mission, vision, and values, set priorities, measurable objectives and activities

× faculty staff is dedicated on implementation of the faculty plans

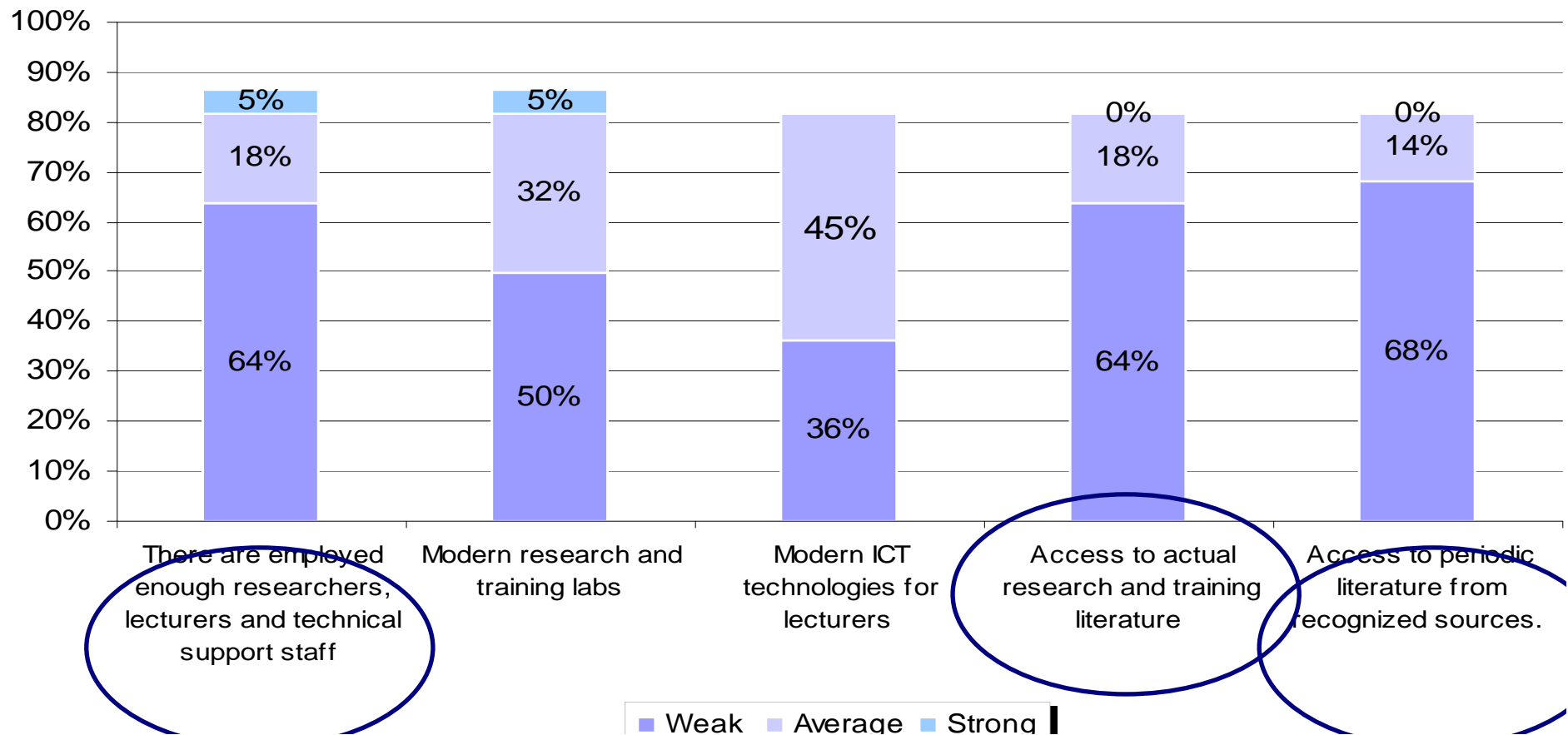
* faculty objectives are harmonized with University, National and European objectives

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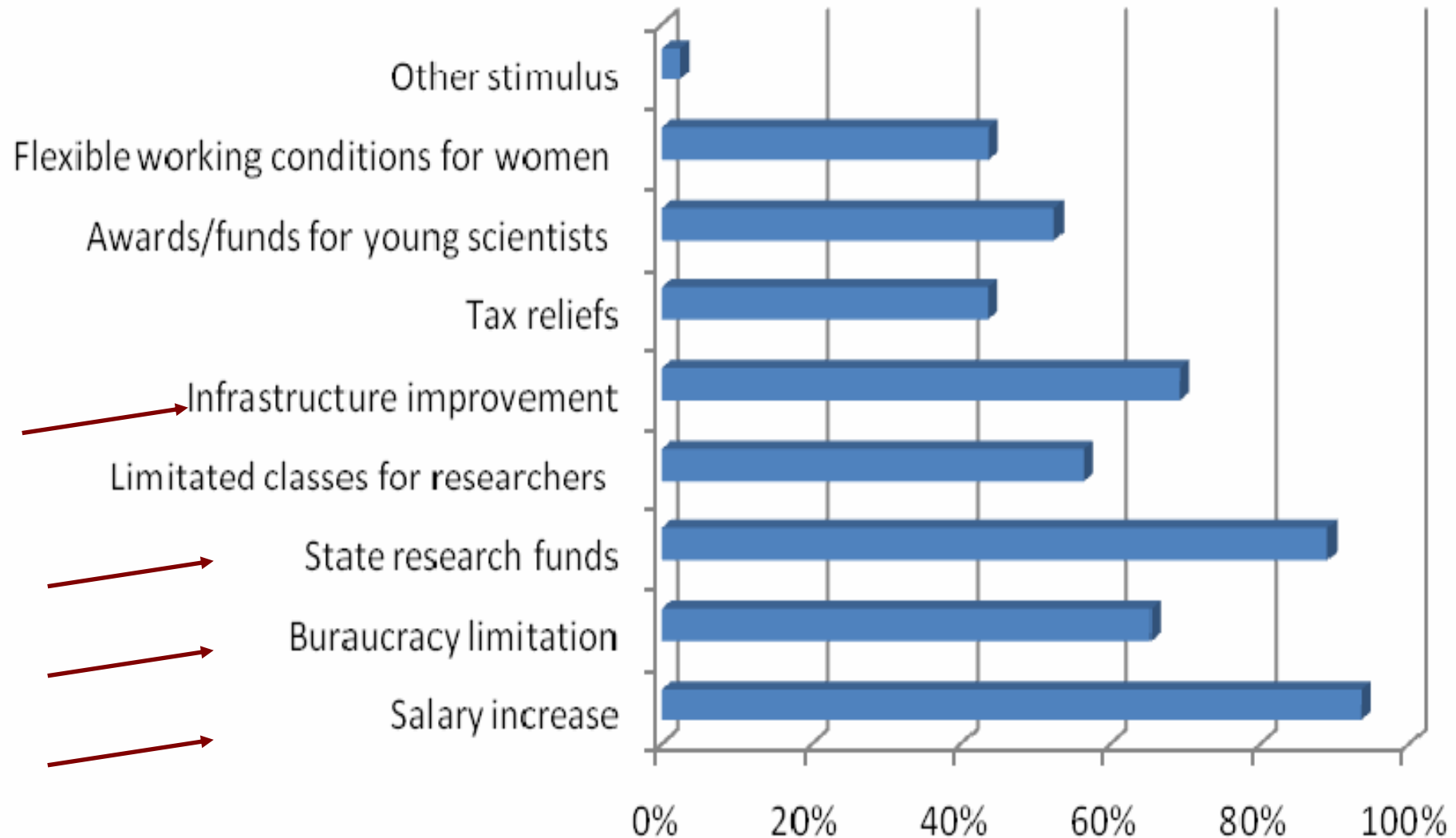


Research environment

Evaluation of existing infrastructure and resources



What should be done to attract young people to scientific career?



Summary

- A lot of **challenges** remain:
 - Teaching staff to improve and widen competences
 - Changing of universities environment to motivate the staff and attract young researchers
 - Improve strategic planning and priorities setting according needs of economy and society
 - Strengthening collaboration with stakeholders

The way ahead

- Undertake continuous efforts to progress the **quality** of Faculty's education, training, information and research services to gain program competitiveness, high levels of achievement and a knowledgeable community.
- Ensure that education and research services are **relevant** to the needs of Bulgarian people, workforce, industry and local and state government.
- Release individuals of all ages with **access** to education, training and information services to develop their competences in order to be globally competitive workers, responsible citizens, and lifelong learners.
- Ensure greatest benefit from education and research resources through **efficient operation and management** of the education and research system and investments in student learning centered ICT.

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Thank you for your attention!

Questions?

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