Comparative study within E*CARE project on mobility and career of researchers: intersectoral mobility issues

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About the E*CARE project "European Career for Researchers"

Main objectives:

- to reveal the substantial obstacles, as well as the positive factors and good practices in sphere of mobility and carrier development of researchers;
- to identify ways to improvement of the research environment and the support to researchers.

About the E*CARE project "European Career for Researchers"

Participants:

- eight European countries (Austria, Bulgaria, Cyprus, Czech Republic, Greece, Hungary, Slovakia and Switzerland).

Methodology:

- 2 sociological surveys – directed to researchers and stakeholders;
- Statistical processing
- Comparative analysis

Questionnaire for Researchers

Willingness for moving from public to private sector (or vice-versa if relevant)

Researchers – BG:

- “Yes” – 16%
- “No” – 77%

All respondents:

- “Yes” – 26%
- “No” – 68%

Questionnaire for Researchers

Willingness for intersectoral mobility (percentages of the positive responses) according to the career stage (results of BG):

- 23% of the PhD students
- 25% of the early-stage researchers
- 11% of the post-docs;
- only 9% of the experienced researchers.

Questionnaire for Researchers

Willingness for intersectoral mobility according to the field of activity of the respondents (results of BG):

- 50% are the representatives of the medical sciences;
- 36% – of the natural sciences;
- 18% – of social science and humanities;
- 7,5% – of the field of engineering and technology.

Questionnaire for Researchers

Willingness for intersectoral mobility – some substancial differences between countrees:

- The researchers from Greece and Cyprus turned out to be mostly disposed to intersectoral mobility – 40% of them have declared a willingness to undertake such an action;
- At the same time only 9% of the researchers from Hungary would change their current job sector.

Questionnaire for Researchers

Open question "What kind of barriers are you facing when thinking about moving from public to private sector (or vice-versa if relevant)?":

- Uncertainty in the new working environment, lack of security and stability, high level of risk in the sphere of private entrepreneurship (Austria, Bulgaria, Cyprus, Greece, Hungary);
- Lack of research positions and considerable research activity in private sector (Bulgaria, Czech Republic, Greece, Hungary, Slovakia);
- Lower salary (Cyprus, Greece, Hungary, Slovakia);

Questionnaire for Researchers

Open question "What kind of barriers are you facing when thinking about moving from public to private sector (or vice-versa if relevant)?":

- Age barrier (Czech Republic, Greece, Hungary);
- Worrying about the chance to return to the current position (Austria, Hungary, Slovakia);
- Private sector not oriented to develop basic theoretical science and humanities (Bulgaria, Greece, Hungary);
- Lower level of the research infrastructure (Greece, Hungary);

Questionnaire for Researchers

Open question "What kind of barriers are you facing when thinking about moving from public to private sector (or vice-versa if relevant)?":

- Problems in health insurance, pension and social security (Austria, Greece);
- Differences in culture and mentality (Cyprus, Hungary);
- Lack of working hours flexibility, worse working conditions (Greece);
- Free publication activity not allowed in private sector (Hungary);
- Difficulties in transfer of knowledge from academic to private sector (Switzerland).

Questionnaire for Researchers

What kind of impact did the international mobility have on your career?	***Not (%)***	***Little (%)***	***Average (%)***	***Rather yes (%)***	***Strong impact (%)***
Motivated me to move from public to private sector	38	6	6	4	2
Motivated me to move from private to public sector	37	4	6	5	1

Questionnaire for Stakeholders

Please rate if the following requirements to researcher's employers and/or funders are applicable in your country:

The value of geographical, inter- and trans-disciplinary and virtual mobility as well as mobility between the public and private sector is recognized as important means of enhancing scientific knowledge and professional development at any stage of a researcher's career.

- **No + Not at all – 44% (BG), 33% (all countries);**
- **Rather yes + Strongly – 8% (BG), 26% (all countries)**

Questionnaire for Stakeholders

Is there a flexible intersectoral mobility (academic world/industry)?

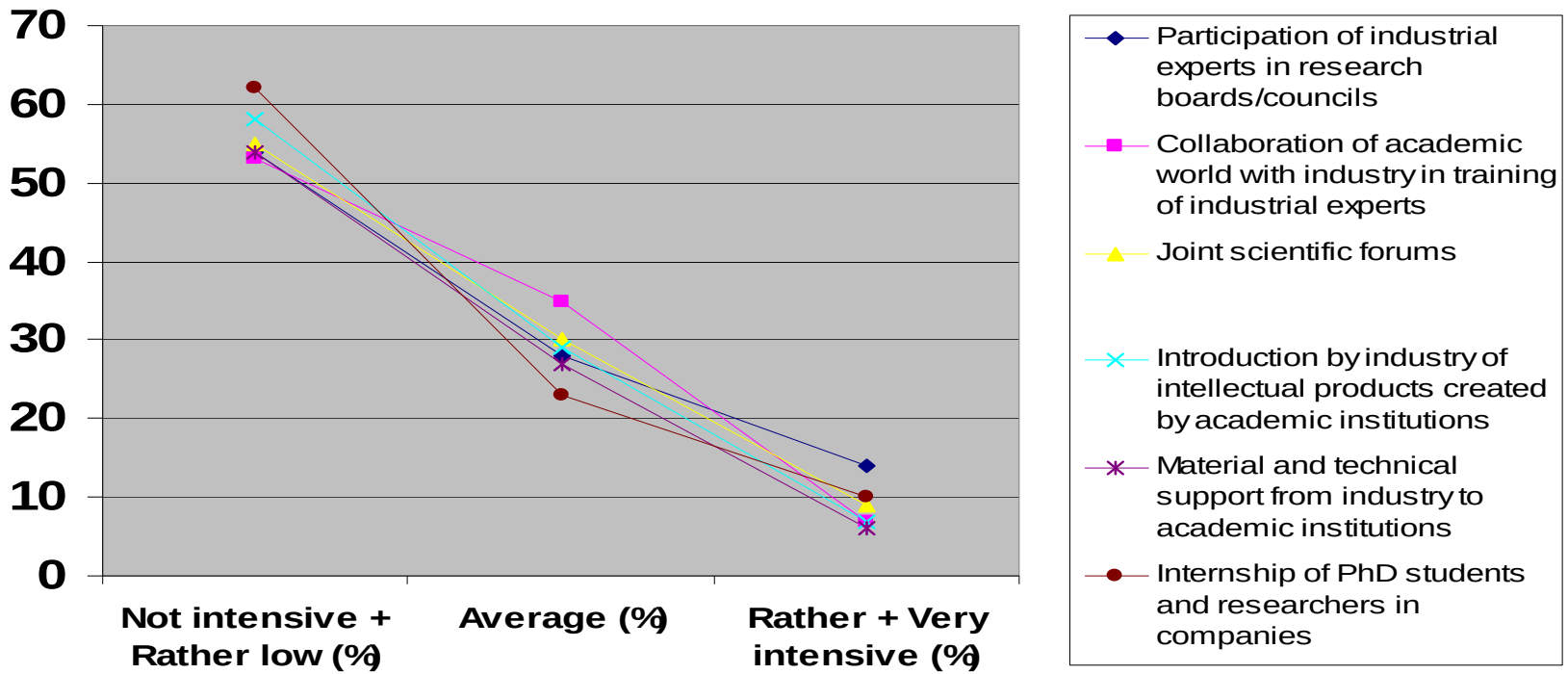
- "Yes, very flexible" – 0%
- "Average" – 28% (BG), 51% (all countries);
- "No, there are many obstacles in this kind of mobility" – 67% (BG), 45% (all countries); 14% (Cyprus)

Questionnaire for Stakeholders

What is the level of collaboration between academic world and industry in your country? (Answers – BG)	***Not intensive + Rather low (%)***	***Average (%)***	***Rather intensive + Very intensive (%)***
Internship of PhD students and researchers in companies	83	14	0
Participation of industrial experts in research boards/councils	75	19	3
Collaboration of academic world with industry in **training of industrial experts**	**39**	**53**	**3**
Industrial scholarships/sponsors for lecturers (researchers) specializations	80	17	0
Joint research projects	**56**	**33**	**11**
Joint scientific forums	**42**	**39**	**14**
Material and technical support from industry to academic institutions	64	28	3
Consulting from/to academic institutions	61	28	3
Introduction by industry of intellectual products created by academic institutions	69	25	3

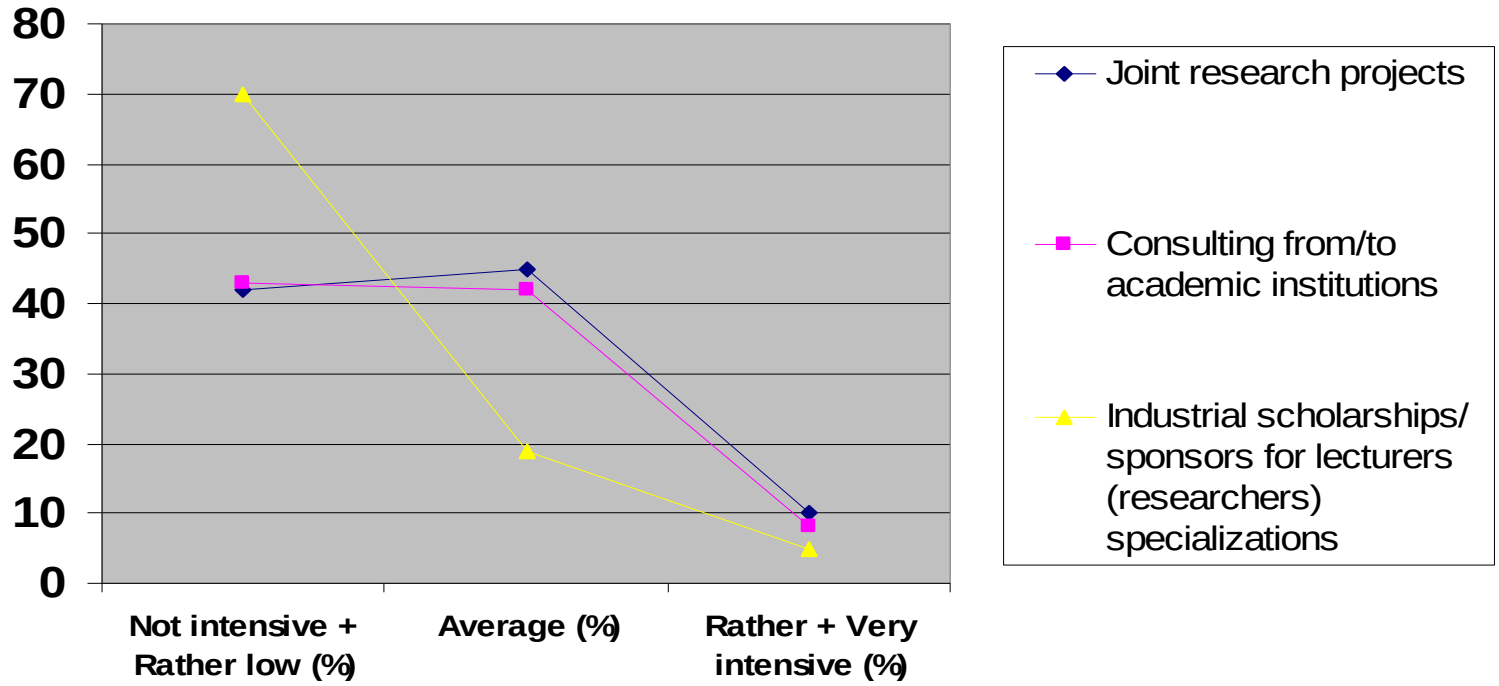
Questionnaire for Stakeholders

Level of collaboration between academic world and industry (all countries)



Questionnaire for Stakeholders

Level of collaboration between academic world and industry (all countries)



Questionnaire for Stakeholders

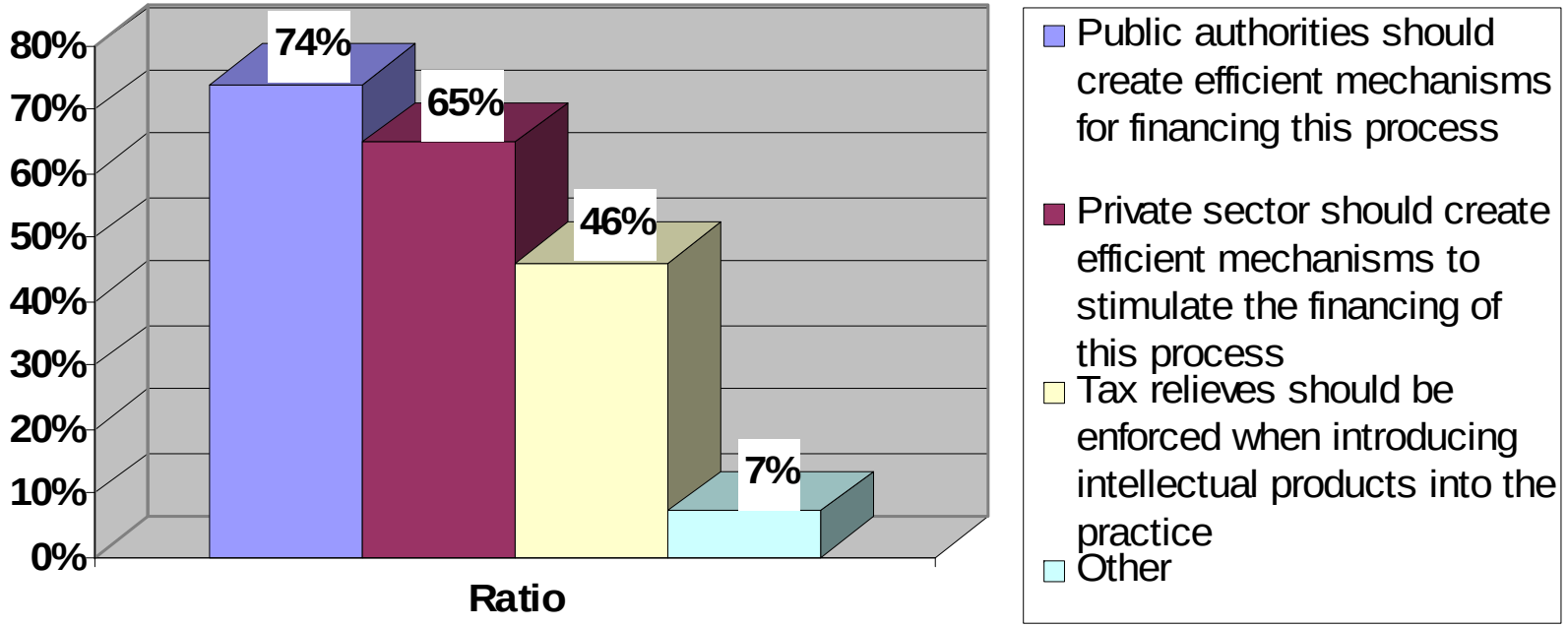
Level of collaboration between academic world and industry (all countries)

In general, according to the survey results, most intensive intersectoral research collaboration in all presented forms we meet in Switzerland. Austria is on next position. Least collaborative are the academic sphere and industry in Cyprus.

Questionnaire for Stakeholders

- As a next task, the respondents were asked to give some ***examples of successful academia-industry collaboration*** in the corresponding country;
- Most provided examples are from the ICT sector, between pharmaceutical research centres and companies, and in the field of machine-building.

Questionnaire for Stakeholders



Measures for developing a flexible intersectoral mobility of researchers

Questionnaire for Stakeholders

Measures for developing a flexible intersectoral mobility of researchers

Some additional measures are suggested, too:

- Considering the intersectoral mobility as a "plus" in evaluation of the researcher for taking an academic position or for carrier development (Austria, Bulgaria, Switzerland);
- Providing more information about the existing opportunities and about the specificities of the respective sector (Bulgaria, Hungary);
- Harmonisation of the different pension systems (Austria);
- Encouraging of knowledge intensive companies (Greece).

Conclusions

- The older and more experienced the researchers are, the less desire they have for intersectoral mobility actions (obviously the younger people are much more flexible and ready to meet challenges);
- The poor developed industrial research causes a low motivation of researchers for moving from the public sector to industry;
- According to the survey results, the international mobility has a very small effect as a motive for further intersectoral mobility;

Conclusions

- No one confirms the label “very flexible” to the intersectoral mobility, and that fact indicates the necessity of specific measures to be taken in order to overcome the problems in this field;
- Joint research projects and consulting from/to academic institutions turned out to be the leading forms of collaboration between academic sphere and industry;
- In order to be fostered the flexible intersectoral mobility of European researchers and the academia–industry collaboration, the public authorities and the private sector should develop efficient mechanisms for the financing of these processes.

Thank you for your attention!

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