

The involving of foreign experts in dissertations evaluation in Moldova and (potential role of) EaP STI Evaluation Platform

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The doctorate in the Rep. of Moldova... in figures

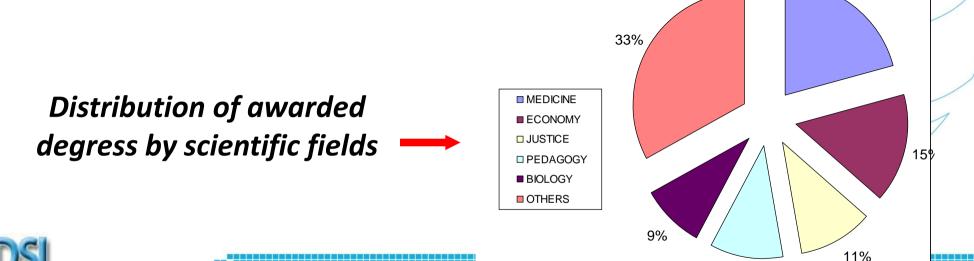
Number of PhD students – 1,6 thousands (in addition about 3,5 thousands people work on theses outside the studies);

Number of doctoral schools – 43;

Number of persons authorized with the right of PhD supervisor – 1,2 thousands;

Number of scientific degrees awarded annually - about 200;

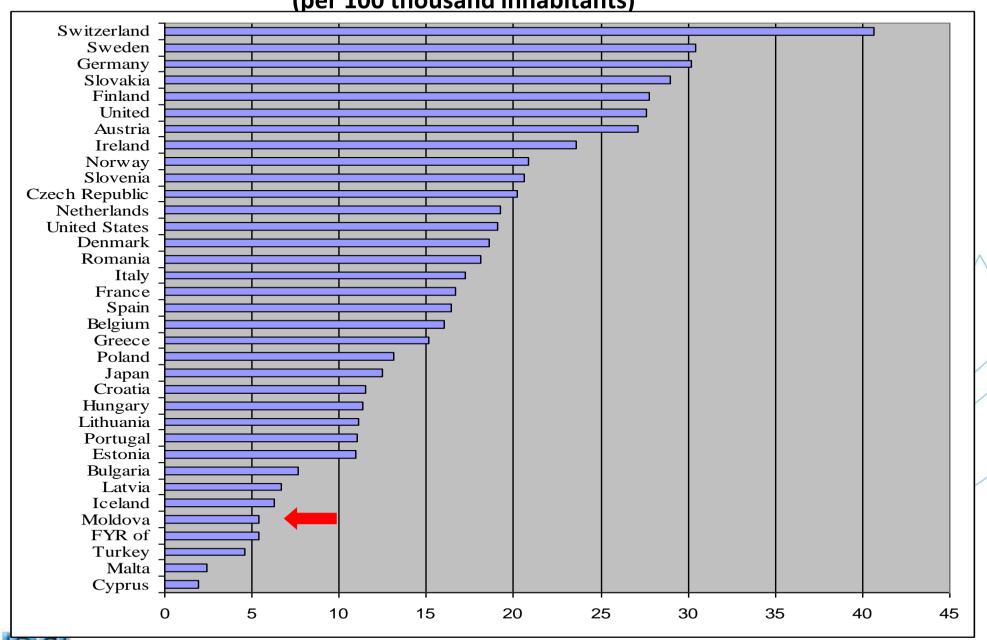
During 1993-2015 there were awarded 540 degrees of Doctor Habilitat (former Doctor nauk) and 3887 degrees of Doctor of Science (former Kandidat nauk), plus 599 scientific degrees awarded abroad have been recognized in MD.



21%



Number of scientific degrees awarded annually (per 100 thousand inhabitants)



Evaluation of dissertations in the Rep. of Moldova

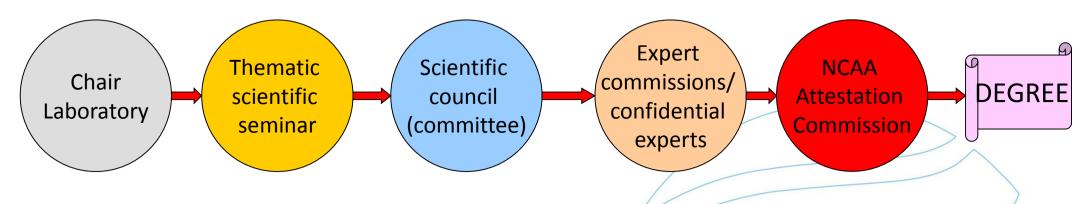
- Thematic scientific seminars 126 permanent and other ad-hoc seminars;
- Scientific councils (assessment committees) ad-hoc for each dissertation:
 - * 5-9 voting members and 2-3 official reviewers (nonvoting);
 - * traditionally are included *members from abroad for habilitate theses and for dissertations of foreign candidates*;
 - * 1348 participated persons in 2014-2015.
- 24 expert committees of NCAA on fields (226 experts);
- Attestation Commission of NCAA (19 members) final decisions.

A system that has incorporated elements of both the Soviet and the European system of defending dissertations



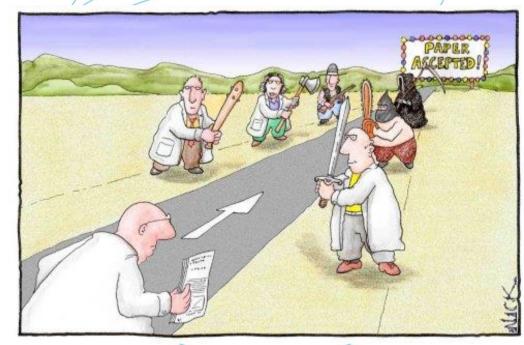


The route of defending theses and awarding degrees in Moldova



Criteria used in evaluation:

- scientific relevance;
- impact;
- originality, independent critical thinking skills;
- use of adequate methodology;
- presentation of the information;
- understanding of relevant literature;
- published results (articles, results etc.);
- •compliance with good conduct in research etc.





Anyway ... still low quality in evaluation of dissertations

Why? General causes:

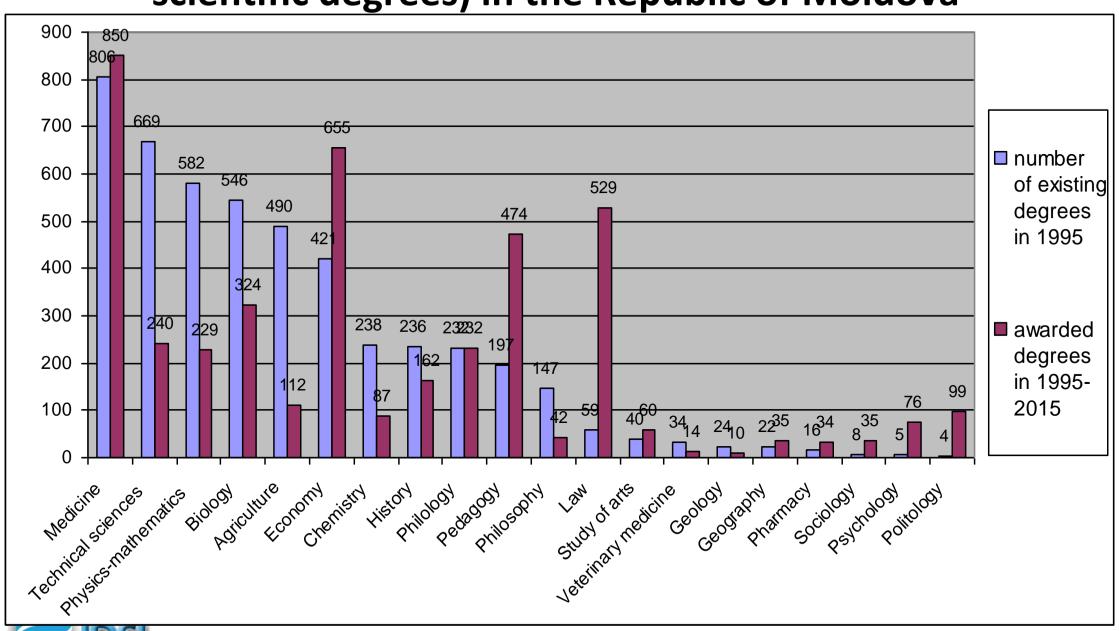
- The lack of meritocracy in a post-Soviet and post-socialist state (e.g., institutional funding is not allocated as result of institutional assessment);
- Small scientific communities (close relations of a limited number of available experts);
- Law evaluation and impact assessment culture (e.g. lack of regular and comprehensive evaluation mechanisms for all elements of R&I system, policies, organisations, programmes etc.; only about 20% of project directors have publications in Web of Science).

Specific causes in doctoral studies:

- Reputational mechanisms do not work usually (areas with weak expert communities);
- Different requirements for quality of dissertations applied in some areas and thus easier ways to get degrees.
- As result More qualitative evaluation (higher standards) in areas with scientific traditions and schools (physics, mathematics, chemistry) and less in areas with rapid growth in the number of people with scientific degree (law, pedagogy, economy)

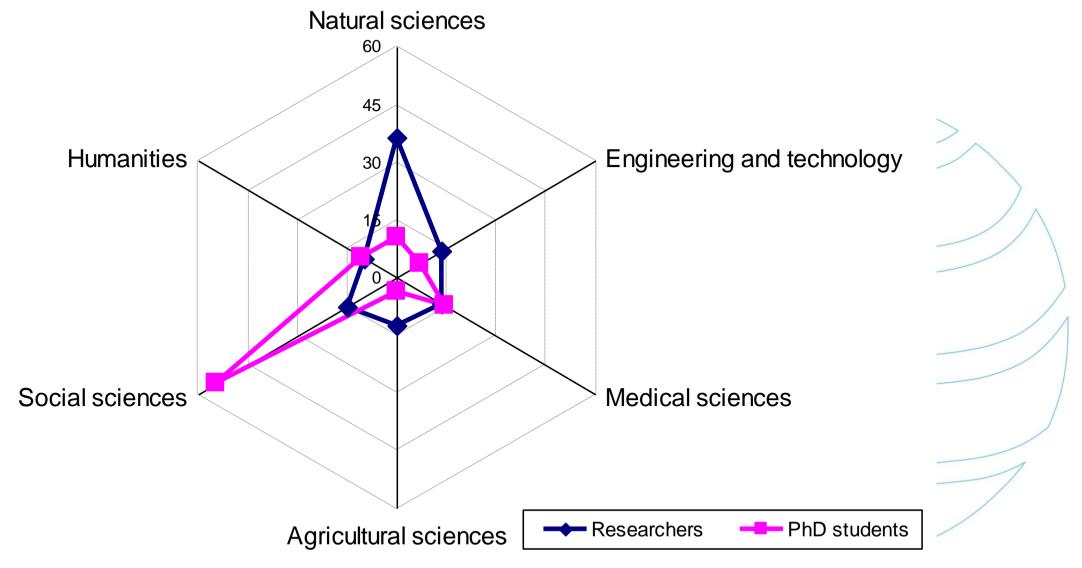


The reproduction of human scientific potential (with scientific degrees) in the Republic of Moldova





Distribution of PhD students and researchers in Moldova





How can it be enhanced the quality of dissertations' evaluation?

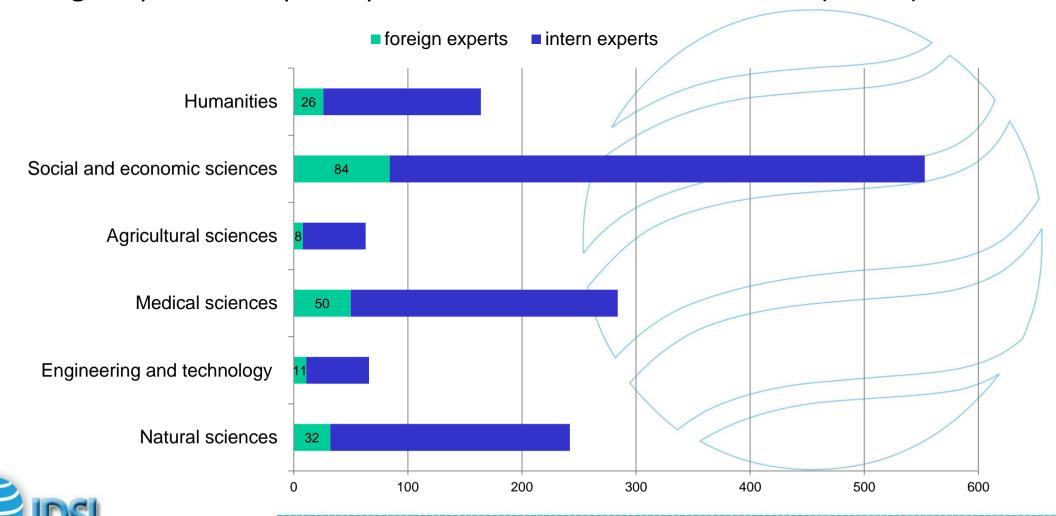
- 1) The involvement of foreign experts, especially in areas that do not ensure critical mass and do not have traditions for an objective assessment;
- 2) Prioritization of internationally recognized results and using in the evaluation bibliometric indicators based on Web of Sciences and Scopus:
 - In the first four areas according to the number of awarded degrees (medicine, economics, law, education): 58% of awarded degrees and only 5% of the number of articles of Moldovan researchers (Scopus in 1996-2014)
 - the most competitive four areas (physycs-mathematics, engineering, chemistry, biology): 72% of the number of articles of Moldovan researchers and only 21% of awarded degrees.
- 3) Promoting honest and competent local experts (stimulation, a register of scientific frauds, development of reputational mechanisms etc.)



Evaluation of dissertations by foreign experts in Moldova

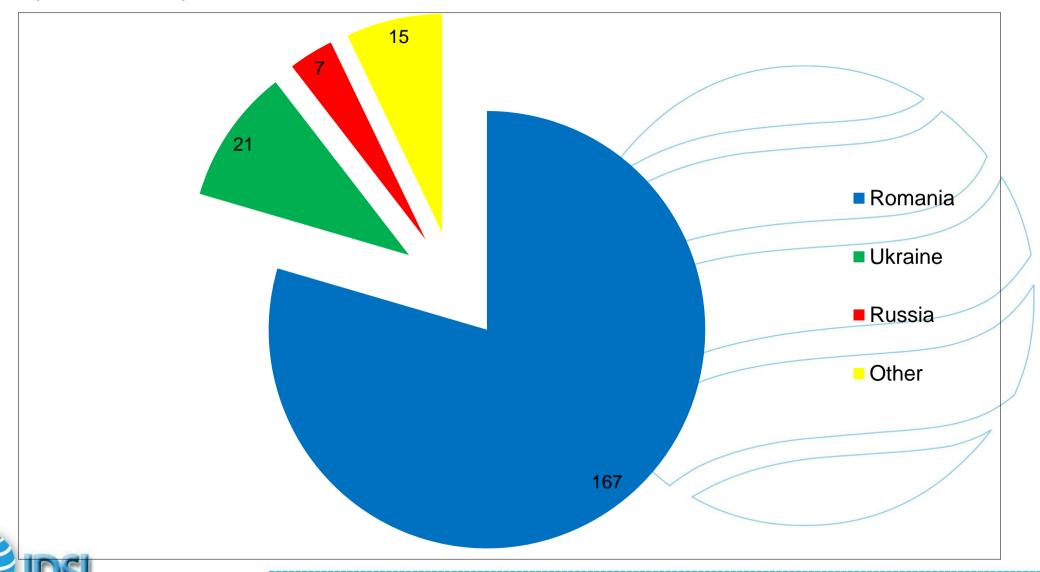
Number of foreign experts in the evaluation of dissertations in 2014-2015 - 211 persons or 15,7% of all involving persons (1348);

Foreign experts have participated in 309 dissertation defences (of 406).



Evaluation of dissertations by foreign experts in Moldova (2)

Experts from 15 countries participated in the evaluation of dissertations in Moldova (2014-2015), incl. from Ukraine - 21, Belarus – 2, Azerbaijan – 1, Georgia - 1



Why current involvement of foreign experts is not enough?

Experts are invited / funded by PhD student or supervisor (limited objectivity);

Often the same people are invited (close relations), e.g., in 2014-2015, 2 persons from abroad were present in 7 evaluation committees, 3 persons – in 6 committees, 6 persons – in 4 committees, 11 persons – in 3 committees.

Lack of mechanisms to involve external experts in the "confidential" evaluation (other than public defending);

The national authority does not have a database of persons from abroad that could be involved as experts;

The involvement of reviewers is challenged by difficulties for establishing contacts.



How can platform contribute to improving theses evaluation

- By providing *more comprehensive information* about potential evaluators of theses from EaP countries;
- By offering the possibility to select *the most efficient experts* (internationally recognized researchers), based on objective criteria;
- By providing *real independence to the evaluator* and the exclusion of conflict of interest (when the reviewer is selected and invited by PhD student / its scientific superviser);
- By offering the possibility of *involving experts* not only as Board members, but also as confidential experts of dissertations already publicly defended (especially in areas that do not ensure critical mass, where expert community is very weak, where reputational mechanisms do not work);
- By offering to expert the possibilities both to participate online in defence of thesis (viva) and to send a reference (to thesis or to summary)



Possible steps for involving foreign experts in dissertations evaluation using EaP STI Evaluation Platform

Setting up a coordination mechanism for national authorities

Defining common requirements for the potential theses reviewers.

Establishing the required information about each expert

Identifying the experts with skills for evaluating theses

Establishing communication between bodies; designation of the persons responsible for coordination by each authority; setting up communication procedures; exchange on approaches about procedures and cooperation readiness etc.

Development of identification approaches; defining *eligibility criteria* for the selection of experts – *eg., minim* 3 or 5 articles in Web of Science or Scopus etc.

Assessing user needs; overview national procedures and criteria on thesis evaluation, establishing potential synergies and needs; development of the form required to be completed about experts etc.

Organising periodical calls for selection of experts by the national authorities; identifying the in other ways (publication/citation analysis) etc.



Possible steps for involving foreign experts in dissertations evaluation using EaP STI Evaluation Platform (2)

Formation of thematic lists of experts

Organizing the database of potential evaluators

Inviting the experts to review dissertations caseby-case

Development of quality mechanisms and monitoring the work of evaluators

Establishing a procedure to receive data of potential reviewers from national bodies; drawing up the *joint thematic lists* based on established criteria etc.

Developing a *joint*database;
developing the
procedures on the
joint use of collected
data; exploring the
potential of a joint
database etc.

Inviting the experts as members of
Scientific council /
official reviewers (in public defending); requesting the experts as additional reviewers of theses in areas where there is are scientific frauds

Standards for evaluators of dissertations; Code of conduct; guidlines for evaluating; monitoring mechanisms etc.





What other actions would be neccesary?

The most important thing – the willingness and awareness from the authorities and academic communities

- Comparative analysis of ways to review / defend theses in EaP countries in order to detect commonalities and divergences;
- Activities for harmonizing national procedures to allow the involvement of foreign experts through the Platform e.g. It is very important to ensure online participation and Open access to theses;
- Adjusting the national legal provisions to enable the implementation of the mechanism of involving experts from abroad in reviewing theses;
- Solving financial issues of involving foreign experts in the evaluation (as the solution providing only administrative expenditure by the national authorities, without financial remuneration for experts **see Stimulation**)





What other actions would be neccesary? (2)

- Stimulating the experts to register in database and to participate in theses reviewing: e.g., considering the *review of thesis as scientific result* (*publication*) and awarding points for them in process of evaluation / career advancement;
- The connection between the scientific classifications used in countries for a more accurate involving of experts in reviewing theses;
- Sharing the experience between national bodies (e.g., meetings to discuss developed new practice, which ensures the avoidance of conflicts of interest, forms and criteria of evaluation, capacity building seminars etc.)
- Promoting the platform as tool in evaluating doctoral thesis, inclusively utility, successful cases etc.
- Using a common analytical basis (e.g., works in Web of Science and Scopus; common anti-plagiarism system etc.).





However, the question remains:

Platform will support:

1) The processes of review of scientific research proposals within different funding and grant schemes

(this is emphasized in the Memorandum of Understanding)

or also

2) The processes of evaluation of other elements / aspects of RDI system (one of which can be dissertations, which are results of learning through research)





THANK YOU FOR YOUR ATTENTION!

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