

Introduction

The following report represents an overview of the current models and practices of funding doctoral studies in Montenegro and Albania. It was made within the Erasmus+ project *Reforming doctoral studies in Montenegro and Albania – a paradigm of good practice* (MARDS)*.* The project MARDS addresses doctoral studies as the most important educational level in Montenegrin and Albanian higher education system and has the general objective to restructure doctoral studies in Montenegro and Albania in line with the Salzburg Principles and to establish two sustainable joint Doctoral Schools, as examples of good practice for the Western Balkan region. One of the project’s specific aims is to propose a sustainable model of financing doctoral studies in the two countries on national levels.

Aim of this report is to provide an up-to-date picture of the practices of funding doctoral education at two Montenegrin and four Albanian universities, which are partners in MARDS project, as well as to include suggestions for improvements and introduction of a new model of funding. The Universities included in MARDS project are:

1. University of Montenegro

2. University of Donja Gorica

3. Polytechnic University of Tirana

4. University of Shkodra “Luigj Gurakuqi”

5. University of Vlora “Ismail Qemali”

6. Metropolitan University of Tirana

The report is based on the questionnaire on the evaluation of models of funding doctoral studies in Montenegro and Albania, which was prepared by prof. dr Nataša Kostić and prof. dr Predrag Miranović from the University of Montenegro with the help of dr Lucas Zinner from the University of Vienna. The questionnaire was sent to the representatives of each university in the beginning of March 2019 and the answers were collected by the end of March. The questionnaire consisted of nine questions relating to different aspects of financing doctoral education as well as the opportunities that candidates have to finance their doctorate. It was accompanied by a SWOT analysis (strengths/weaknesses/opportunities/threats) of the current state of doctoral education and its funding in Montenegro and Albania.

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**FUNDING OF DOCTORAL STUDIES IN MONTENEGRO AND ALBANIA**

1. **Introduction**

Montenegro has a 44-year-long doctoral studies tradition, dominantly related to the **University of Montenegro** (UoM) which is the only public university in the country and the oldest and largest Montenegrin higher education institution. It is a comprehensive university which covers a wide range of disciplines, from humanities and social sciences to natural sciences, technical sciences, medicine and arts. It was founded in 1974 in Podgorica, comprises 19 faculties and 3 research institutes with campuses in eight Montenegrin cities and has around 20,000 students. It has been implementing the Bologna standards from 2004 and the implementation of a three cycle system 3+2+3 started in 2017. The first doctorate was awarded in 1975, which is considered to be a starting point for doctoral education in Montenegro. Doctoral studies are organized at 15 university units (faculties) in 25 doctoral study programmes, last for three academic years, and end with the public defence of a doctoral dissertation by the doctoral candidate. There are 45 doctoral candidates a year on average, with 10 to 20 doctoral degrees awarded annually. The Centre for Doctoral Studies was established in 2015 with an aim to ensure the quality of doctoral education, to contribute to the internationalization of doctoral studies and to support the multidisciplinary and interdisciplinary approach in doctoral education. The Centre, with its Doctoral Studies Committee, is also responsible for monitoring the whole process of doctoral education, and its role is to support the development of supervisors’ skills, to monitor both doctoral candidates and supervisors until the evaluation of the doctoral thesis and to give opinion to the Senate on all phases in the procedure during a doctoral study programme.

**University of Donja Gorica** (UDG) is a private university founded in 2007 in Podgorica. UDG has 12 faculties in the fields of social sciences, humanities, arts, informatics and technologies, with about 3,000 students. All programmes at UDG are designed in line with the principles of the Bologna Declaration and the University offers studies at Bachelor, Specialist, Master’s and PhD level. Doctoral studies are organized at three faculties. The number of doctoral candidates is very low (from 2016 to 2018 there were 6 candidates a year on average, and in 2019 there are 12 doctoral candidates).

**Polytechnic University of Tirana** (PUT) was founded in 1951 as a state institution in Tirana under the name of Higher Polytechnic Institute, and in 1991 it was established as a university. It is a public university, the oldest and the second largest university in Albania, which comprises 7 faculties in the fields of technical and natural sciences and one scientific institute, with about 10,000 students. **University of Shkodra** “Luigj Gurakuqi” (UNISHK) was established in 1957 and has traditionally been the major higher education institution in northern Albania. It has 6 faculties in the fields of natural sciences, social sciences and humanities, and more than 10,000 students. **University of Vlora** “Ismail Qemali” (UV) is a public higher education institution in south Albania founded in 1994. It comprises 4 faculties in the fields of social sciences, humanities and technical sciences and it is the only Albanian higher education institution that has endorsed and signed The European Charter for Researchers in 2016. **Metropolitan University of Tirana** (UMT)is a private higher education institution established in 2010 in Tirana. It consists of 3 faculties in the fields of engineering, information technology and economics.

The system of doctoral training in Albania has gone through several phases of ups and downs since the 1990s. Until 2002, when the principles of the Bologna Declaration were introduced in pilot form, there were doctorates after the classical Magistratura (master’s studies that lasted for three academic years). But neither the duration of doctoral studies nor the results in terms of clear quality requirements were under control. Between 1990 and 2002 there were only a few supervisors with a very limited number of graduates. At the beginning of the 2000s an improvement could be observed, but there was no conclusive connection between excellent scientific research and doctoral studies. This continued until 2009, when the first students who studied in the 3+2 model of studies graduated. In the next ten years there were efforts to improve the quality of doctoral studies, but in most cases there are no PhD studies which stand up to international level.

2.  **The current state of affairs in funding of doctoral studies in Montenegro**

This section of the report provides an overview of the situation in Montenegro, based on the information provided by the University of Montenegro, University of Donja Gorica and Ministry of Science, Montenegro.

The amount of money spent for doctoral education in the country last year

Doctoral studies at the University of Montenegro are financed from tuition fees (ranging from 500 EUR to 1,500 EUR per semester) that doctoral students have to pay to be enrolled in a doctoral study programme. In academic 2017/2018, this amounted to 122,480 EUR. UoM participates in a large number of national and international projects (around 250 in the last four years), but the amount spent for doctoral education through the research projects is difficult to calculate.

At University of Donja Gorica doctoral studies are organized at three faculties. Tuition fee is 1,200 EUR per semester. For the 12 candidates enrolled in academic 2018/2019, this amounted to 28,800 EUR. If research funds, which are sometimes covered through international or national research projects, are added to this, we come to an amount of cca. 250,000 EUR for PhD studies at the University of Donja Gorica.

The Ministry of Science of Montenegro awarded 19 scholarships for doctoral candidates at universities in Montenegro in academic year 2018/2019, in the total amount of 747,000 EUR for the period of up to three years. Additionally, through the Call for Awarding Grants for Innovative Projects published in 2018, 10 projects were accepted for funding, within which there is a plan to employ 4 researchers (1 young researcher – doctoral candidate and 3 experienced researchers/PhDs) in the amount of approximately 40,000 EUR. In 2018, the Ministry of Science also co-financed the costs of the development and implementation of doctoral thesis after completion of PhD studies, i.e. obtaining the PhD degree, for 25 PhDs in the amount of almost 34,000 EUR.

The main sources for institutions to finance doctoral education

The main sources at UoM and UDG are tuition fees for doctoral studies paid by the candidates themselves (and sometimes by the companies they work for). Some research activities can be funded through international and national research projects.

The number of doctoral candidates employed or otherwise funded by the institution

A half of all doctoral candidates at UoM are employed as teaching assistants at UoM in academic 2018/2019 (out of the total number of 105 doctoral candidates, 53 are employed as teaching assistants).

Doctoral candidates at UDG are employed elsewhere – either in education and research sector or in business sector (about 15% of them receive funding from ther companies).

The opportunities candidates have to receive funding for their doctorate

Doctoral candidates employed as teaching assistants at UoM receive salary. Other doctoral candidates can apply for a scholarship awarded by the Ministry of Science, since academic year 2018/2019. In academic year 2018/2019, this scholarship was granted to 17 doctoral candidates at UoM (out of a total of 57 candidates enrolled), and 2 doctoral candidates at UDG (out of a total of 12 candidates enrolled). The scholarship is awarded for a period of up to 3 years, and the right to apply have all doctoral candidates who enroll in doctoral studies at a Montenegrin university. The scholarship covers a salary in a net amount of 700 EUR per month and the research costs, material costs and mobility costs of the doctoral candidate and his/her supervisor in the amount of up to 10,000 EUR per year. For those doctoral candidates UoM reduced tuition fees to 500 EUR per semester and UDG provided free tuition for the two of their doctoral candidates who received this scholarship.

As of March 2019, doctoral candidates can be funded through a national project financed by the Ministry of Science. Individual grant can amount up to 130,000 EUR if the project envisages the engagement of a young researcher for a period of up to 2 years. In the 15 projects approved for funding in 2019, 2 doctoral candidates are engaged. Ministry of Science also awards an amount of up to 1,500 EUR for the expenses of thesis defense after a doctoral candidate defends his/her PhD thesis.

The main sources for candidates to finance their doctorate

Their own resources (for the vast majority of them); scholarships and grants provided by the Ministry of Science (for some of them, but only those enrolled in 2018/2019 academic year); company that candidates work for (for very few of them); national projects financed by the Ministry of Science, if the topic of the doctorate is compatible with the topic of research projects conducted at a university (for only 2 candidates in academic year 2018/2019).

The extent to which doctoral candidates are financially supported from various sources

A half of all doctoral candidates at UoM are financially supported by university employment. Candidates are to a small extent financially supported by the national public source (Ministry of Science scholarships and national research projects) or their employer (very few of them). Some candidates have no financial support.

The majority of doctoral candidates at UDG do not receive any financial support. Candidates are to some extent financially supported by the national public source (Ministry of Science scholarships and national research projects) or their employer (very few of them).

SWOT analysis of the current state of doctoral education and its funding in Montenegro

 The text that follows is a summary of the input collected in the SWOT analysis section of the questionnaire. It should present the actual status of doctoral education and its funding at the University of Montenegro and University of Donja Gorica.

 Strengths:

- Introduction of European standards

- Cooperation with universities from abroad

- Young, motivated doctoral candidates

- Scholarships for full time research for some candidates

- Good research potential at the University

- Strong and professional supervisor-candidate relationship

- Access to advanced research equipment (through cooperation with other universities and home-based infrastructure)

- Existence of a PhD hub

 Weaknesses:

 - Inadequate research infrastructure

- Lack of strategic approach to funding

- Lack of funding opportunities other than the state budget

- Lack of doctoral studies in English

- Small number of doctoral candidates

- Level of scientific achievement is lower than in the developed countries

- Work overload of doctoral candidates who work and study at the same time

- Lack of system support to Phd students

 - Poor cooperation between universities and industry

Ideas for overcoming the weak points include investment into infrastructure, devising of a new institutional model of funding doctoral studies, diversification of funding sources, introduction of doctoral studies in English, an increase in the number of doctoral candidates and improvement of research potential through cooperation in international research projects.

 Opportunities:

 - Funds for research can be provided through EU funded research projects

- More scholarships for doctoral candidates awarded by the Ministry of Science

- Establishment of cooperation with the private sector

- Increase of the University budget for research

- Scholarships awarded to doctoral candidates by business stakeholders

 - Increased cooperation with universities from abroad at the level of PhD studies

 Threats:

 - Inadequate state funding

- Inadequate budget for research

- Small number of candidates interested in doctoral studies

- “Low quality” of doctoral students

- Worse financial situation of candidates

- Doctoral studies are not completed at all

Ideas for overcoming or reduction of those threats include an increase of funding for higher education, a search for various sources of funding research, popularization of doctoral studies in the sense of motivating candidates for doctoral studies (providing good conditions during the study period – income, research infrastructure, status of full time researchers, etc.) as well as for holding the PhD title (employment, position in society, etc.), and appropriate enrolment policy that includes interview with the candidates before enrollment.

Overview of the current model of financing doctoral studies in Montenegro

Neither of the two Montenegrin universities is satisfied with the current model of financing doctoral studies. Doctoral candidates are obliged by the Law on Higher Education to pay (rather high) tuition fees, which is in fact the main source to finance their doctoral education. As a result, there is a small number of doctoral candidates. A consequence of this is very low budget for higher education institutions to finance doctoral studies.

The current model, which relies on self-financing, is not satisfactory as students are under pressure of their daily job activities that often take their time and make them unable to focus on research. Serious PhD research needs time, focus, and devotion to research activities. Balancing between job duties and research activities is often a heavy burden for candidates, which makes them abandon their the studies.

There is no educational policy at the state level that would take into account the need to provide institutional support for doctoral candidates. Instead, it all comes down to individual initiative. There should be a stable source of financing doctoral candidates and their research, which would enable the best students to continue their studies and do the research.

3. **The current state of affairs in funding of doctoral studies in Albania**

This section of the report provides an overview of the situation in Albania, based on the information provided by the Polytechnic University of Tirana (PUT), University of Shkodra “Luigj Gurakuqi” (UNISHK), University of Vlora “Ismail Qemali” (UV) and Metropolitan University of Tirana (UMT). Up to now, doctoral education in Albania has functioned in line with the previous Law on Higher Education, according to which a doctoral student received, to some extent, funds from the institution (only for conference attendance or article publications), from any projects they were involved in or benefited from, and from the inter-institutional agreements with foreign universities; all other costs, such as tuition fees, were self-financed. At the moment, universities are in the “gap”, where the old model is out of use and the new one is yet to be implemented. The new Law on Higher Education envisages the Grant for Scientific Research, which includes the funds for doctoral studies. The distribution of funds for doctoral studies will be done by the National Agency for Scientific Research and Innovation (NASRI) on project basis, according to the criteria defined in the sectoral strategy and in the Law for the yearly budget. It is envisaged by the Ministry of Education that doctoral candidates will engage full-time in doctoral studies. A condition for their admission in the form of full-time engagement in doctoral study programme is that the candidate is not employed. Doctoral candidates will be paid during their engagement in a doctoral study program. However, the issue of payment is still evasive. It is unknown how much this fee will be and who will fund it. Research Centers (established at the University level or independent from the University) can also provide funds for doctoral studies.

The current state of affairs therefore reflects the “old” model of funding, since the new one is not yet applied at this moment. Doctoral studies in Albania are undergoing a process of change, and from 2013 onwards the allowance of new quotas by the Ministry of Education has been blocked for this program cycle.

The amount of money spent for doctoral education in the country last year

 Funds for doctoral studies are part of the budget for scientific research. In 2018 the funds at disposal for scientific research at PUT were 2,655,467 ALL (0.24% of the total budget of PUT). Funds for articles and conferences were 6,886,807 ALL (0.61 % of the budget of PUT).

 The money spent for doctoral education at UNISHK goes for the workload of academic staff for which the Finance Department doesn‘t have an exact figure because the workload of academic staff includes the Bachelor and Master‘s programs as well. Doctoral studies at UNISHK were closed in 2013.

 At the moment, there isn’t any specific budget for doctoral studies at UV, due to the shutdown of doctoral studies. However, even before 2013, no specific budget for doctoral studies existed at the University.

 UMT is currently in the process of opening doctoral studies.

The main sources for institutions to finance doctoral education

 The main sources at PUT to finance doctoral education are the budget (financing obtained from the state), the research projects and bilateral cooperation agreements with universities from abroad.

At UNISHK the main resources are the infrastructure (that is used for other study cycles as well) and the tuition fees paid by doctoral candidates (approximately 2,300 EUR per study year). UNISHK has a total of 13 doctoral candidates.

At UV all doctoral students pay tuition fees, i.e. they are themselves funding their studies.

The number of doctoral candidates employed or otherwise funded by the institution

 The total number of doctoral candidates employed at PUT is 45 as full time employed teaching assistants and 35 as part time employed teaching assistants. Their salary is based on their teaching workload.

 At UNISHK not a single candidate has been employed or otherwise funded by the University during their doctoral studies.

 The UV has 7 active doctoral candidates of which 6 are the staff of the University and receive salary based on their teaching workload.

 At UMT there are 3 doctoral students, enrolled in doctoral studies at universities abroad, who are employed as teaching assistants. In order to support their professional development, they are in the position to use the Erasmus mobility programme for teaching at another European university.

The opportunities candidates have to receive any funding for their doctorate

 Unfortunately, there aren’t many opportunities for doctoral candidates to receive any funding unless they are employed as teaching assistants and receive salary. Universities do not envisage any specific grants in their budgets for this issue. Additionally, the National Agency for Scientific Research and Innovation is in its very initial steps. The Ministry of Education has occasionally provided small grants for doctoral candidates, but there isn’t any concrete strategy in this direction. Doctoral students can receive certain funds from research projects and inter-institutional agreements with other foreign universities.

The main sources for candidates to finance their doctorate

 The majority of candidates finance their doctoral studies by themselves. To much less extent, other possible sources of financing are European or other research projects or grants (e.g. Erasmus+ mobility program), the National Agency for Scientific Research and Innovation, Ministry of Education, University itself and private companies.

The extent to which doctoral candidates are financially supported from various sources

 Doctoral candidates are to a great extent self-financed, that is they don’t receive any financial support. Some universities employ them as teaching assistants. At PUT, doctoral candidates can to some extent be financially supported through research projects, bilateral cooperation agreements, by private companies or from other international sources.

SWOT analysis of the current state of doctoral education and its funding in Albania

The text that follows is a summary of all the input collected in the SWOT analysis section of the questionnaire. It should present the actual status of doctoral education and its funding at the Polytechnic University of Tirana, University of Shkodra “Luigj Gurakuqi”, University of Vlora “Ismail Qemali” and Metropolitan University of Tirana.

 Strengths:

- Inter-institutional agreements in the realization of PhD studies, which include co-financing

- The resources of the business sector, which can contribute to research funds for PhD studies

- Projects with national or international partners, as a source of financing PhD research

 - High quality of some doctoral programmes (e.g. Albanology)

 - At some universities doctoral candidates get paid as teaching assistants

 - University autonomy

 - Strong research potential

 - Openness of the University to research sponsors

Weaknesses:

- Lack of a concrete strategy of research funding

- Lack of any specific budget for doctoral studies at the University

- Very low state budget for scientific research and doctoral studies

- Lack of collaboration with the private sector with respect to funding

- Insufficient investment in research laboratories

- Very low impact of the results of doctoral research on the industry, which leads to the lack of interest of companies to invest in doctoral research

- Doctoral study programs don’t match to the needs of the labor market and the priorities of the state economy

- Very low involvement of the University in projects funded by the EU

- Insufficient number of doctoral study programs.

Ideas for overcoming the weak points include an increase in budgetary financing of research activities and creation of a specific budget for doctoral education, the creation of a mixed funding scheme, establishment of cooperation with the private sector by conducting research in the fields they are interested in, the use of all financial opportunities for investment in research laboratories, a thorough analysis of the labor market needs, improvement of staff capacity so that they are more active in writing project proposals funded by the EU and the involvement of doctoral candidates in such projects, and an increase in qualified academic staff so that new doctoral programs can be opened.

Opportunities:

- European integration of Albania, which might bring new funding opportunities for the universities

- The opportunities through Potential Demands and the Increasing Empowerment of the business for Research and Development

- The new Law on Higher Education envisages a new source of funding, i.e. NASRI will provide funds through projects

- Opportunities to improve cooperation with foreign higher education institutions (especially in USA and EU) in the field of research and development

- Development of an institutional strategy in the field of research and development

 - MARDS project.

Threats:

- Centralized financial governance and management

- Very low budget dedicated to Higher Education by the Albanian Government

- Delay in the establishment of the financing scheme due to the lack of compromise between institutions

- Lack of competition for funding between universities

- Facing a lot of bureaucracy at the Ministry of Education during the application process for opening of a new academic program

- Business mistrust about the research potential provided by the institution and the lack of information about it

- Brain drain, as an outcome of the lack of funding.

Ideas for overcoming or reduction of those threats include the changes in the way financial governance and management are established, close collaboration with governmental institutions such as the Ministry of Education, an increase of funding for higher education (especially for research and innovation), establishment of competition for funding between public universities, the promotion of scientific research potential of the university towards the interested parties, and improvement of funding opportunities in order to keep highly skilled individuals in the country.

Overview of the current model of financing doctoral studies in Albania

None of the four Albanian universities is satisfied with the current model of financing doctoral studies and all of them stress the need for a structural change of doctoral education in Albania regarding the issue of financing. First of all, there isn’t any specific strategy regarding the issue of financing. Doctoral candidates are usually not financially supported, and the cost of doctoral studies is covered with their personal funds. Additionally, the funds that are provided by the Ministry of Education are not transparent enough and are not awarded according to academic and research merits only. Another problem is finding funding for research projects. At the moment, the universities in Albania do not allocate funds for scientific research as a separate line in their budgets. Higher education institutions mostly provide some funding by participating in a variety of grant programs, but the number of grants granted to universities in Albania is very small. The scholarships granted in the framework of projects or cooperation agreements are very limited, which makes them an inadequate source of financing.

There are hopes that the implementation of the new Law on Higher Education will bring more opportunities regarding the funding of doctoral education. The Law envisages that doctoral candidates will engage full-time in doctoral studies and will be paid, but it is still unknown how much their monthly salary will be. Another important issue is that both Ministry of Education and the universities should envisage a specific budget for doctoral studies in their annual budgets.

4. **Recommendations for the new model of funding doctoral studies in Montenegro and Albania**

The development of a quality doctoral program and the successful completion of a doctoral study program require appropriate and sustainable funding. Adequate and sustainable funding is a prerequisite for quality doctoral education. In the process of devising an appropriate model of funding, it is very important to ensure certainty in funding doctoral education for at least one generation of students.

It would probably not be appropriate to say that there is only one model that fits all. To our view, there is a need for a synergy of various sources and roles of interested parties so that the best possible model can be created. Both Montenegrin and Albanian universities agree that it is urgent for the Ministries of Education in both countries to prepare a strategy for funding of doctoral studies. Furthermore, funding sources should be diversified, which means that options other than exclusively governmental public funding should be taken into account.

 Recommendations for the most suitable model of funding doctoral education in **Montenegro** point out to a mix of several sources:

- A **national fund for financing the best doctoral candidates** who enrol in a doctoral study program (with appropriate enrolment policy that includes interview with the candidates before enrollment);

- **Scholarships awarded by the Ministry of Science** to young researchers who are paid for performing research. The program which is now offered by the Ministry of Science is very similar to this, however it is not appropriate that doctoral candidates are officially unemployed while studying;

- A certain portion of **funds for national research projects** (such as a specific PhD projects line) should be explicitely offered for the research work done by doctoral candidates, so that one of the criteria for awarding funding would be the extent to what the project activities are based on doctoral research and the number of doctoral candidates who would act as researchers in the project;

- **International research projects**, funded by various EU programs, are especially suitable source of financing, as they enable doctoral candidates not only to do research but also to develop more specific skills and learn how to work as part of a team. Higher education institutions should support search for research funding by offering services for project applications, in particular for various European funding schemes;

- A mixed model of funding should also include **scholarships for doctoral studies** **provided by the University itself** as well as **scholarships provided by the private/business sector**.

 In **Albania**, there is a lack of research capacity and both the Ministry of Education (in collaboration with other Ministries) and the public universities should invest some efforts in order to improve the situation. Regarding the issue of financing, a combination of grants/scholarships from the National Agency for Scientific Research and Innovation, the Ministry of Education, and universities themselves could be of paramount significance. Additionally, more active involvement of universities in projects funded by the EU and the engagement of doctoral candidates in these projects would also be an appropriate way of funding doctoral studies. To some extent, the involvement of private companies in the field of financing doctoral education should also be supported by the Government and higher education institutions. Finally, it is very important that private companies are encouraged and motivated (especially with tax decrease) to fund doctoral candidates.

The best model of funding doctoral studies in Albania would be a mixed model. This model means financing doctoral studies from a variety of sources, such as:

- **Gonvernmental funds** - the Government provides a monthly salary for every full-time doctoral candidate;

- **Research projects** - establishment of a strong institutional network that ensures the inclusion of doctoral candidates in research groups;

- **Mobilities** - establishment of institutional networks enabling the inclusion of doctoral candidates in mobility programs during doctoral studies;

- **PhD scholarships** - creating the opportunity to cover the tuition fee for doctoral studies.