POLICY ANSWERS

Advancing Financing Sources, Policies and Procedures for Research and Innovation in Kosovo

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List of abbreviations

CRIS	Current Research Information System
ERA	European Research Area
EU	European Union
FWCI	Field Weighted Citation Impact
GDP	Gross Domestic Product
HEI	Higher Education Institutions
HERAS	Higher Education, Research and Applied Science
IPR	Intellectual Property Rights
MESTI	Ministry of Education, Science, Technology and Innovation
NSC/NRC	National Research / Science Council
NRF	National Research Fund
R&D	Research and Development
R&I	Research and Innovation
SIC	Scientific Innovation Council
UP	University of Prishtina
WB6	Western Balkans Six
WP	Work Package

1 Introduction

This report has been prepared by the Riinvest Institute for Development Research in relation to activities of the Work Programme for Capacity Building in Kosovo which is part of Work Package (WP) 3 of the EU-funded project POLICY ANSWERS. This project focusses on capacity building in the Western Balkans (WB) for Research and Innovation (R&I), supporting and monitoring the implementation of the EU-WB Agenda, advancing the integration of the WB in the European Research Area (ERA), and significantly contributing to thematic areas related to the Green Agenda, Digitalisation and Healthy Societies. The project also aims at contributing to advance R&I, Education, Culture, Youth and Sport with policy recommendations.

The main objective of this report is to explore ways of advancing financing sources, policies and procedures for Research and Innovation (R&I) in Kosovo. An adequate research funding scheme is crucial for creating a supportive research environment. Incentives are essential for fostering a vibrant and productive research environment within Higher Education Institutions (HEI). These incentives motivate and reward faculty members for their scholarly pursuits, thereby driving innovation, knowledge creation, and academic excellence. The increased R&I activities through university-private sector collaborations will most likely lead to higher levels of innovation and increased innovative capacity for firms to compete, positively impacting social and economic development.

However, to enhance R&I, there is a need to develop a supportive research environment, which requires public funding, institutional setup, and financial and non-financial incentives and procedures for funding and encouraging the research activity. To this aim, this report proposes recommendations to increase R&I activities in Kosovo.

This short study aims at analysing legal and policy aspects of R&I and to identify obstacles regarding inadequate financing and low development of R&I activities at faculties, universities, and other research organisations. The specific objectives of the assignment are:

- To contribute to the improvement of legal and other conditions for increasing public and private financial resources for R&I to ensure faster integration of Kosovo into ERA.
- Propose solutions for integrating teaching and research activities at the faculties and universities.

The structure of the report is as follows: Chapter 2 introduces the methodological approach used in the study; chapter 3 provides background information on the current situation of R&I in Kosovo, discussing the legal and policy framework for R&I, research infrastructure, and research performance. Chapter 4 provides a detailed analysis of the current financing sources, policies and procedures for R&I at university level, using the University of Prishtina as example. This section draws on qualitative interviews and meetings with researchers, policy makers, and business community representatives. The final chapter draws overall conclusions structured in a way to provide a list of recommendations in the form of a roadmap.

2 Methodology

This research is based on reviewing and analysing strategic documents, research reports, assessments, evaluations and previous studies on R&I in Kosovo and other countries. A review of the state-of-the-art of research in Kosovo sets the scene of research capacities and productivity of universities and institutions. The report uses available secondary data to map the current situation of R&I in Kosovo. The work is primarily based on the following steps:

1) Thorough **desk research and review of relevant documents** to identify relevant studies conducted in more advanced WB economies and in Kosovo on legal and policy aspects of regulating research activities. This exercise is used to understand current barriers and enablers of R&I and how these legal and financial incentives can promote research

initiatives leading to scholarly output. The experiences of other WB economies and countries are used as guiding principles and best practices to draw lessons learnt for Kosovo. The author's experiences evaluating research projects in EU countries enriches the discussion and proposes creative solutions. The study offers tailored recommendations and suggestions for Kosovo by reviewing the literature and best practices worldwide.

2) **Qualitative Interviews and meetings with key stakeholders and institutions** as primary research methods in universities, research organisations and centres, the Ministry of Education, Science, Technology, and Innovation (MEST), and incubators. Interviews with stakeholders, relevant government ministries and agencies, and experts from research and international organisations are conducted. Desk research and meetings with relevant stakeholders helped the consultant to analyse the "state of play" in funding R&I and integration research and teaching activities at the faculties and universities.
3) **Analysis with** two forms of research methods
    - *First*, the study uses a thematic framework analysis based on a qualitative interpretation of the data. The data collected from interviews and discussions with stakeholders have been subject to a thematic framework analysis; its basic qualitative approach provides an in-depth view of relevant issues and the reasoning behind its descriptions and proposed recommendations. Throughout data collection, basic qualitative data processing is provided through notetaking and transcribing, through classifying and/or categorising topics and points (thematic units) to be suitable for retrieval and analysis. At the level of thematic units, commonalities and divergences are used for comparisons, primarily through cross-case analysis. The purpose is to assess critical issues for the study (e.g., the current changes in the R&I system, legal issues related to the incentives for R&I activities, etc.). The comparisons of the legal framework and relevant regulations will be conducted based on the findings from the relevant EU policy areas
    - Second, the quantitative analysis is used to measure the research performance of Kosovo based on the data source of Scopus and to examine the scientific potential from 2010 to 2020.

3 Background information

Research plays a crucial role in achieving a sustainable economic and social development. Despite its importance, the R&I in Kosovo remains in an early development phase. Kosovo's HEI have not adequately addressed the operational and normative factors necessary for promoting research culture, including (but not limited to) legislative, regulatory, procedural factors but also values, attitudes, and beliefs. As a result, the current system at both the national and institutional levels hinders the scientific community from collectively embracing a research culture that advances the production and dissemination of research for the betterment of society.[1]

Due to the extensive global advancements and the development in the global market change, the scientific community must continuously progress through scientific and applied research. Regardless of the domain, achieving market competitiveness and fostering sustainable economic and social development is crucial. However, in Kosovo, science is neglected and fails to be recognised as a sector of utmost importance in the context of societal and economic advancements[2]. Scientific research in Kosovo is at an early stage of development with an ad-hoc approach to planning research facilities and non-systemic management of research policies, lacking consideration for the collective infrastructure landscape of the economy and long-term

[1] Kaçaniku, F., Rraci, E., & Bajrami, K. (2018). The situation of research in Kosovo. *Kosovo Education and Employment Network-KEEN*. https://kec-ks.org/wp-content/uploads/2020/08/The-situation-of-research-in-Kosovo_ENG.pdf
[2] Kaçaniku, F., et al. (2018). The situation of research in Kosovo. Kosovo Education and Employment Network – KEEN.

planning[3]. Higher education institutions play a vital role in fostering sustainable development encompassing economic, social, and cultural aspects, but the study reveals discouraging findings regarding academic and research progress in Kosovo. There is a broad agreement that HEI in Kosovo encounter significant challenges in conducting scientific research, and these challenges are closely linked to the limited financial support, human research capacities and research infrastructure as well as to the prevailing research culture within these institutions.[4]

Investments in R&I from the government remain low. However, the legal requirement for the government to invest at least 0.7 percent of Kosovo's consolidated budget in Research, Development, and Innovation (RDI) remains very low[5]. The current government's budget allocation for R&I is approximately EUR 2.5 million, equivalent to only 0.1 percent of the total Kosovo's state budget. Referring to the law on scientific research activities, Kosovo is obliged to allocate EUR 17.2 million or 0.7 percent of the total budget for innovative undertakings. The R&I remains underfunded as public expenditure for research constitutes 0.01 percent of the GDP (far from reaching the 0.7 percent target). However, the state budget does not include a single source of finance for funding the R&I in Kosovo. Still, research activities are also from international sources, considering the high donor support for HEI.

Compared to regional and international standards, public spending on R&I in Kosovo is very low. For example, in North Macedonia, the percentage of spending on R&D of the Gross Domestic Product (GDP) was about 0.4 % during the period 2015-2020; in Croatia, it was 1.24 % of GDP in 2020; in Slovenia, it was 0.22 % of GDP in 2019.[6] Even with the most optimistic scenario from the government, the figures for Kosovo remain much lower than for the region. In financing research activities, the diversification of funding sources for R&I is very important, and in particular, the increase in private-sector funding. For example, in 2021, the EU spent EUR 328 billion on R&D (2.27 % of EU GDP), of which 57.9 % of total spending within the EU in 2020 was financed by businesses, while almost a third (30.3 %) was financed by governments and another 9.6 % by foreign funds.[7] Thus, the main developments during the period 2010-2020 in the EU were the decrease in the percentage of financing from the government sector. Although Kosovo does not have data on private sector R&I funding, the participation of the private sector remains very low and a focus of the R&I policy should be the increase of private sector R&I funding.

The primary sources of international funds for research and higher education in Kosovo are two long-term bilateral projects with Austria (HERAS) and the USA (TTL), amounting to approximately EUR 11 million. While a range of international donors supports higher education and research activities in Kosovo, most of these programmes focus on enhancing institutional capacities and human resources development, with minimal emphasis on developing research infrastructures. Due to the lack of reliable statistics, it is challenging to determine the overall investment in research infrastructure. Still, there is no clear plan for significant investments in this area. Moreover, investments in research equipment by universities and research institutes are minimal, and establishing well-equipped research laboratories is sporadic[8,9]. In this vein, the European Union progress report (2022) recommends that the government needs to i) develop a strategic framework for R&I while increasing government funding; ii) implement a comprehensive Smart Specialisation Strategy (S3) to engage the private sector and attract investments; iii) continue efforts to participate in the Horizon Europe programme for collaboration and funding

[3] Regional Cooperation Council. (2022). Research Infrastructure Roadmap for Kosovo. https://www.rcc.int/download/docs/RI%20Roadmap%20Kosovo%20digital.pdf/beecc1686ffe03170d13e8d8721b45e2.pdf. Accessed May 2023.
[4] Kaçaniku et al. (2018). The Situation of Research in Kosovo. Kosovo Education and Employment Network – KEEN.
[5] Regional Cooperation Council (2022). Research Infrastructure Roadmap for Kosovo
[6] Eurostat. (2023). R&D expenditure. https://ec.europa.eu/eurostat/statistics-explained/index.php?title=R%26D_expenditure&oldid=590306#:~:text=Highlights&text=In%202021%2C%20EU%20research%20and,year%20when%20it%20recorded%202.31%20%25.&text=In%202021%2C%20the%20EU%20spent,compared%20with%202.02%20%25%20in%202011. Accessed May 2023.
[7] Eurostat. (2023). R&D expenditure.
[8] Regional Cooperation Council. (2022). Research Infrastructure Roadmap for Kosovo
[9] European Commission. (2022). Kosovo 2020 Report, Commission staff working document, Brussels.

opportunities; iv) improve data availability on researchers, GDP allocation for research, and performance indicators for effective monitoring and decision-making.[10]

To summarise, increasing the budget for financing R&I is crucial for the innovation and economic development of Kosovo. The following section reviews the policy and legal framework for R&I.

3.1 Policy framework for R&I

Kosovo's R&I policy is in its early stage of development with a limited scope of intervention and policy instruments. Strategic documents and other policy instruments for implementing these strategies are limited or non-existent compared to the best EU practices.

The R&I policy can be analysed through the lenses of a macro, mezzo, and micro framework. This analysis is helpful for analysing the situation from policy ideas to programme implementation. It is also essential to analyse the interaction between different levels of governance and which role the institutions/organisations or participants at each level framed play in the design of policies and programmes as well as in their implementation. The Parliament and relevant Government Ministries or Departments determine the laws and policies at the macro level. In the case of the R&I policy framework in Kosovo, the MESTI and the National Research Council (NRC) are the main actors at the macro level. Although the Department of Science and Innovation of MESTI is mandated to deal with policy making in R&I, it also exercises the policy implementation role due to the absence of a National Research Fund (NRF). Because of the lack of such nationally profiled research granting institutions, the funding of research projects is currently fragmented in various departments and agencies.

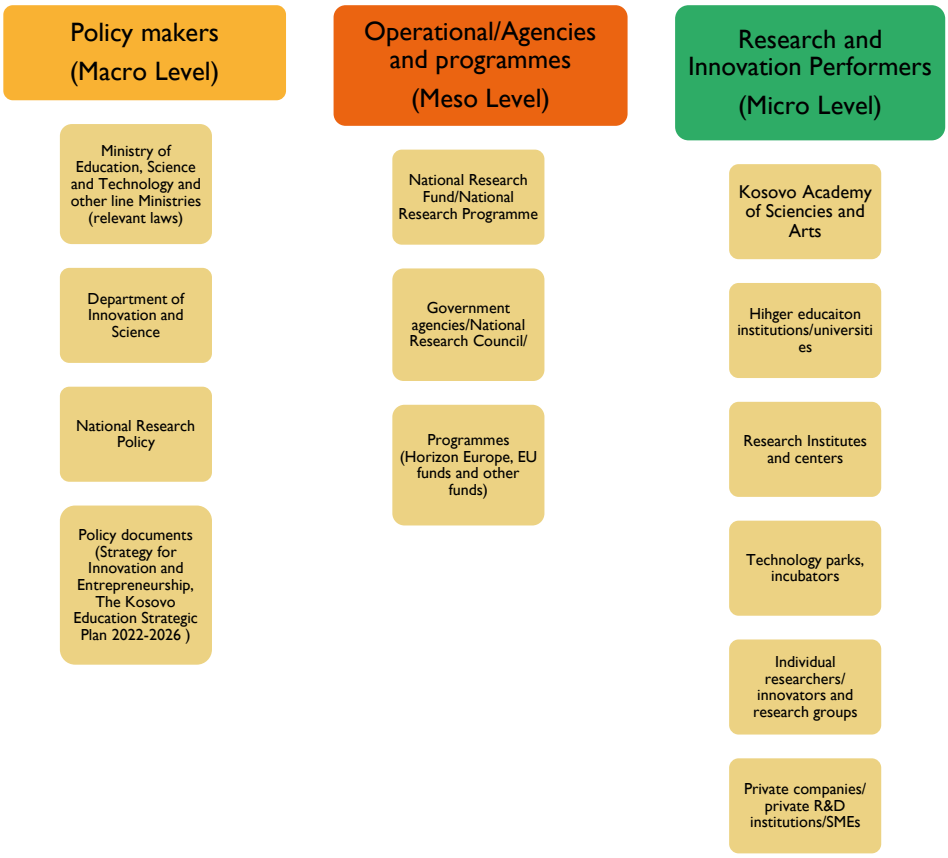


Figure 1: Policy framework for R&I in Kosovo
Source: Author's elaboration

[10] European Commission (2022). Kosovo 2022 Report, Commission staff working document, Brussels.

The policy set-up for R&I lacks a coherent and integrated strategic approach for developing, prioritising, implementing, and promoting research activities. First, the NRF is a missing link between policy design and implementation; without the NRF institution, it is difficult to effectively design and implement any policy instrument to support R&I. For example, while the MESTI created administrative instructions aligned with relevant laws, their implementation is still pending. Although the legal framework envisions collaboration between academia and the private sector, in practice, the partnership between these sectors remains very limited, with mainly ad-hoc initiatives. The lack of policy instruments (e.g., innovation voucher schemes) is also attributed to the limited capacity of the Department of Innovation (only two staff) and the absence of the NRF. There is a need to align all three levels of governance of R&I policy to effectively implement the ambitious targets of the National Research Programme or any future increase in the budget allocation for R&I. Establishing the NRF is expected to have significant implications for developing and implementing various research grant schemes and financing R&I.

On the legal aspects, the Law on Scientific Research Activity outlines the government's responsibilities for research governance, policy development, and financing of research institutions in Kosovo. Kosovo has established the NRC to enhance research capabilities and internationalisation within the R&I system and oversee the implementation of its research policy. However, after a prolonged inactivity, the NRC was re-established in early 2022. The law also includes provisions for creating a NRF, with an annual allocation of 0.7 % of the national budget, to support various research activities in Kosovo[11].

The Law on Scientific Innovation and Transfer of Knowledge and Technology provide regulations for innovation governance in Kosovo, including establishing the Scientific Innovation Council (SIC) to support innovation activity. However, despite the law being endorsed in 2019, the SIC was not established, leading to a lack of a clear innovation policy framework and funding instruments. There is currently no innovation fund, and the administrative instruction for supporting voucher schemes is being revised and expected to be launched this year (June-Sep 2023). The lack of a NRF and R&I policy instruments such as innovation vouchers and research grant schemes resulted in no R&I projects being financially supported by the government.

The Kosovo Education Strategic Plan 2022-2026 gives only limited emphasis on R&I, despite its focus on higher education development. The reconvening of the NRC in 2022 led to the drafting of a new NRP for 2023-2028, with ambitious goals to support research activities, including developing a robust research system, training researchers, infrastructure development, internationalisation, and interdisciplinary collaboration. The NRP prioritises health, society, energy & environment, and agriculture, focusing on Green Deal and digitalisation. However, the budget allocation for research in 2023, as outlined in the draft NRP, is approximately 0.32 % (EUR 10.27 million) of the National Budget[12], which will be difficult to implement without a well-established funding agency.

3.2 Research infrastructures

The research infrastructure is a critical precondition for developing R&I activities. The Law on Scientific Research Activities (Law No. 04/L-135) defines research infrastructures as "*facilities*, equipment, *and services necessary for scientific research activities, such as laboratories, libraries, professional and scientific journals, archives, and all other sources with scientific content*"[13]. The law aims at supporting scientific research activities that lead to socio-economic impact in Kosovo. The study on the Research Infrastructure Roadmap for Kosovo[14] outlines the necessity to establish a solid legal basis for its development and adoption. It urges the need that

[11] Law on Higher Education in the Republic of Kosovo No. 04/L-037. https://masht.rks-gov.net/ligji-per-arsimin-e-larte-ne-republiken-e-kosoves-nr-04-l-037/ . Accessed May 2023.
[12] Education Strategy 2022-2026. https://masht.rks-gov.net/en/education-strategy2022-2026/
[13] The Law on Scientific Research Activities (Law No. 04/L-135). https://masht.rks-gov.net/wp-content/uploads/2022/09/ligji-per-veprimtari-kerkimore-shkencore-2013-eng.pdf. Accessed May 2023.
[14] Regional Cooperation Council. (2022). Research Infrastructure Roadmap for Kosovo.

all scientific and technological development entities, including institutions, individuals, infrastructures, equipment, and facilities, should undergo information processing and retrieval procedures for designing the Research Infrastructure Roadmap. This includes data collection, database creation, data security and exchange, analysis, and statistical processing. According to Article 17 of the Law, publicly funded research entities must develop a research infrastructure development plan, which should be initiated by the MESTI in collaboration with universities and research institutes. Creating such plans by research entities would significantly contribute to a more transparent process and enable more efficient research infrastructure management at the national and institutional (university) levels.

3.3 Evaluation of research performance

Publicly funded research evaluation has become a central concern of policy makers for two main reasons. With increased evidence-based policymaking and investment in R&I, governments worldwide want to make informed decisions on where to invest and what society gets in return. Kosovo does not have an established system of measuring and assessing research performance at national or institutional levels. Because of the lack of research performance assessment at the national and institutional (university) level, measuring research productivity remains limited to the available data on publications outlets and platforms such as Web of Science (WoS) and Scopus.

Various reports and documents demonstrate the low scientific output in Kosovo (see next section for details and data). The very low research productivity can be attributed to several factors, including insufficient government funds for R&I, a lack of clear legal frameworks and advanced strategies, and weak implementation mechanisms. Another significant factor limiting research productivity are the lack of (and inadequate) financial incentives for the engagement of academic staff from HEI in research activities.

Kosovo's universities prioritise teaching over research, resulting in a perception that research is not a fundamental aspect of academic work. Establishing a clear distinction between teaching and research is crucial; emphasising the importance of ongoing scholarly pursuits within higher education institutions is a precondition to promoting research culture.[15] Research work in HEI in Kosovo is primarily associated with the promotion process for academic staff, with no specific mechanism for financial incentives, monitoring, or evaluation research beyond the requirement for academic promotion, despite the acknowledgement in the staff contracts that responsibilities extend beyond teaching.[16] The academic staff promotion should be bound to research and fundraising activities for research projects.

Once established, the research assessment framework from MESTI at the national level regarding the institutional or university level needs to be channelled to measure the individual research performance of small academic units and academic staff. Thus, HEI must invest more in research and evaluate their teachers' scientific achievements and performance to get a higher ranking in the national research performance assessment. MESTI has introduced various regulatory initiatives and guidelines to provide more precise definitions and orientation for universities and academic staff about the quality of the research platforms. The quality of scholarly output has increased but remains very low compared to regional and international comparisons.

Kosovo's research sector faces challenges in accessing reliable statistical data, making it difficult to assess its current state and compare it with its regional counterparts. Open data is crucial for achieving sustainable development goals and facilitating transformative public policies. Therefore, improving data availability and investing in the concept of 'open data' are vital for developing the research infrastructure in Kosovo.[17] The current work on the S3 and the Current Research Information System (CRIS) is essential to register researchers and collect statistics

[15] Regional Cooperation Council. (2022). Research Infrastructure Roadmap for Kosovo.
[16] Kaçaniku et al. (2018). The Situation of Research in Kosovo. Kosovo Education and Employment Network - KEEN
[17] Regional Cooperation Council (2022). Research Infrastructure Roadmap for Kosovo

regarding R&D and HEI for better informed, evidence-based strategic decisions[18]. Although there has been an increase in academic staff meeting technical requirements for their rank, there remains a significant misunderstanding about the nature of scientific research. Merely focusing on publishing articles does not guarantee high-quality research, as the current system prioritises formalities over substance. Additionally, academic staff highlight a lack of sustainable research funding in Kosovo's HEI, with the University of Prishtina as an example where a specific budget for research is absent despite its research role, leading to discouragement and criticism of bureaucratic funding opportunities.[19]

The progress evaluation reports for each objective of the National Development Strategy 2010 indicate that the progress has been significantly lower than planned. However, during the covered period of the National Development Strategy 2010, there has been a noticeable increase in the number of scientific publications, although both their quantity and impact remain below the international average, with Kosovo ranking last.[20] The lack of institutional initiatives to secure funding creates a paradox where HEI and academic units fail to motivate academic staff to apply for funding opportunities. This demotivation, especially towards young researchers, hinders their ability to lead large projects. HEI should establish specialised research groups to increase success in grant applications, compensate for their time and temporarily relieve them from other responsibilities, develop innovative and competitive ideas, have experience drafting project proposals with international donors, and have advanced English language skills.[21] Considering the significant budget of nearly EUR 95.5 billion allocated to Horizon Europe (the most extensive EU funding programme for R&I), it is highly advantageous for research-focused stakeholders to secure these funds. Kosovo would need to pay an annual fee of EUR 2 million to transition from its current third-party status in Horizon Europe. While attaining a higher category would enhance Kosovo's visibility as a consortium partner, researchers and HEI in Kosovo encounter other notable obstacles, as they lack incentives and competitive research ideas to pursue funding opportunities within Horizon Europe.

3.4 Research productivity: Kosovo in the regional and international context

This section reports the findings from the data on scientific publications extracted from the Scopus database for 2010-2019. Figure 2 illustrates the low scholarly output of Kosovo compared to other WB economies. For the same period, Kosovo had 1,850 publications compared to Slovenia, a high performer, which has 29,376.

[18] European Commission (2022). Kosovo 2022 Report, Commission staff working document, Brussels.
[19] Kaçaniku et al. (2018). The Situation of Research in Kosovo. Kosovo Education and Employment Network - KEEN
[20] HERAS, Hartëzimi i Sistemit të Kërkimit dhe Inovacionit në Kosovë. (2019). https://www.heraskosovo.org/publications/Koncept_dokument_Hartezimi_i_Sistemit_te_Kerkimit_dhe_Inovacionit_ne_Kosove.pdf. Accessed May 2023.
[21] Kaçaniku et al. (2018). The Situation of Research in Kosovo. Kosovo Education and Employment Network - KEEN

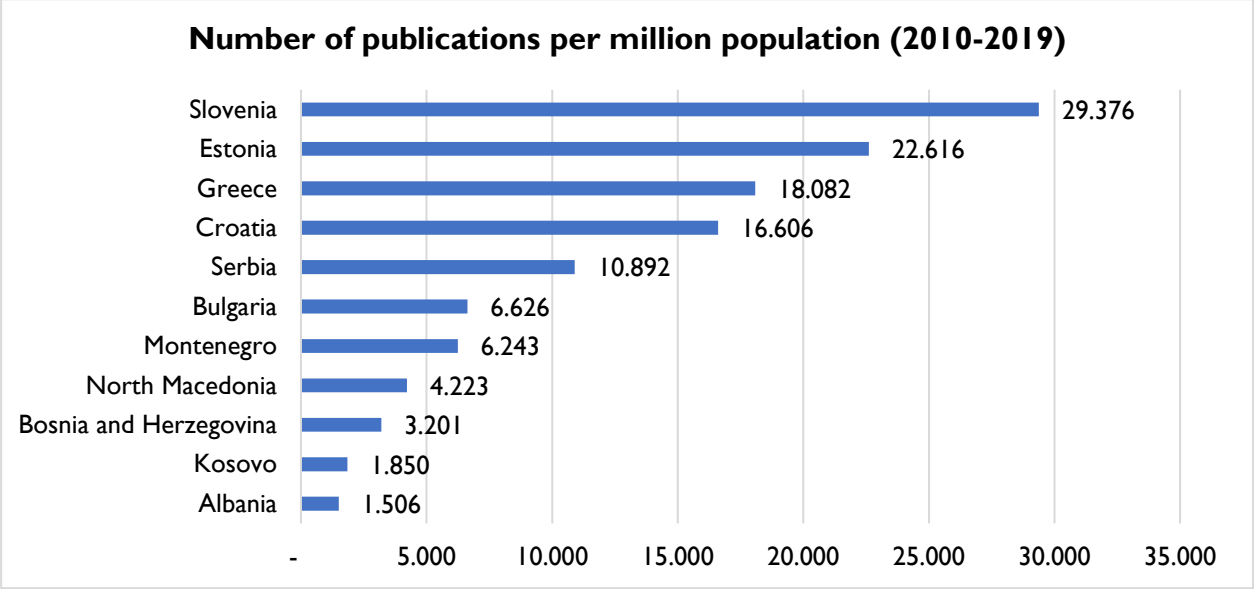


Figure 2: Number of scientific publications per million population (2010-2019).

Source: Author's calculation; data based on Scopus Database and Population data from World Bank-World Development Indicators and formula to normalise per million population was applied (see https://www.stats.indiana.edu/vitals/CalculatingARate.pdf)

Data on scientific publications from 2010 to 2019 (Figure 2) are normalised based on population, resulting in the number of publications per million people. Figure 2 illustrates the findings, indicating that – in this selection of countries - Slovenia has the highest number of scientific publications per million population, reflecting a strong research output. On the other hand, the WB economies, including Kosovo and Albania, exhibit significantly smaller publication profiles. Kosovo has one of the lowest figures of scientific publications, indicating limited research output, closely followed by Albania. However, there are encouraging findings regarding international and institutional collaborations, where Kosovo performs exceptionally well even when compared to leading countries like Slovenia, Croatia, and Serbia. These collaborations are significant as they facilitate social networks between Kosovo's academics and counterparts in other regions worldwide, potentially enhancing scholarly output and other performance indicators. To capitalise on these opportunities, policy makers can implement policies that foster university collaborations and promote international student and academic staff exchanges, particularly with major science-leading countries such as the UK and the USA. Such research collaborations would ensure long-term sustainability and enhance Kosovo's competitiveness among its regional counterparts.

The impact of publications from Kosovo on overall scientific development, as expressed through the Field Weighted Citation Impact (FWCI) metrics that considers citation numbers, is below the average global impact (Figure 3). This performance snapshot of Kosovo's scientific institutions results from the unmet objectives and implementation of proposed measures from the National Science Programme 2010. Much work remains to be done for Kosovo's scientific profile, regarding quantity and scientific impact, to enable active participation in the ERA.[22]

[22] National Research Council (2023). The National Research Programme 2023-2028.

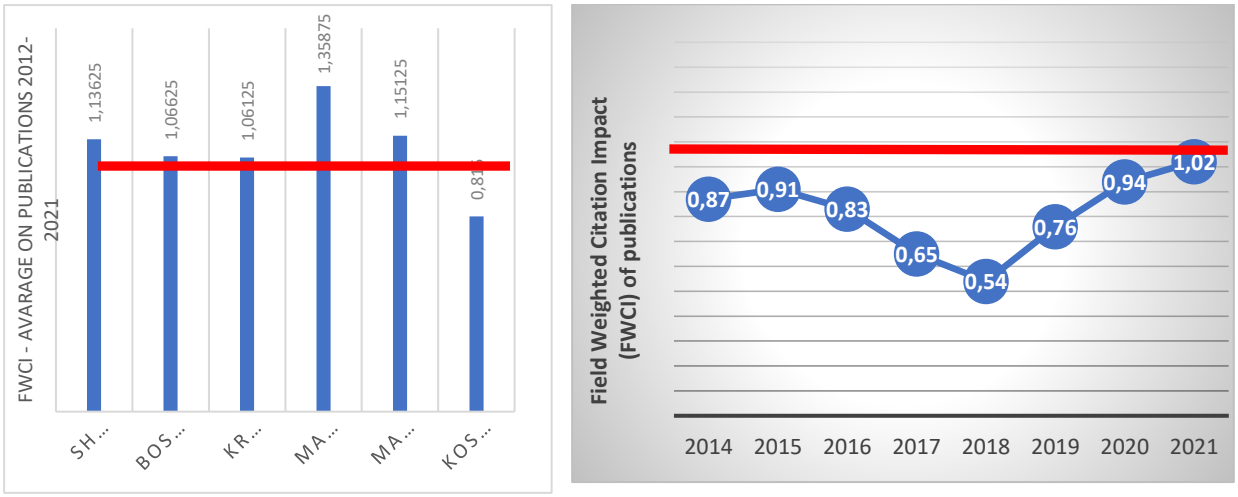


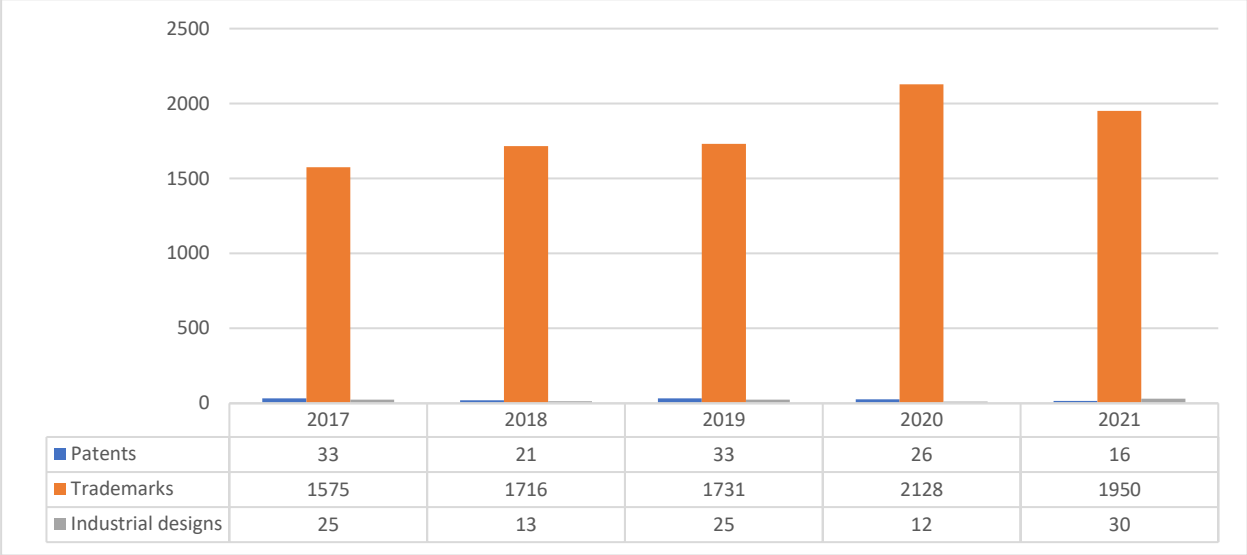
Figure 3: The average impact at the international level 2014-2021

Source: FWCI [Scopus, September 2022], adopted from National Research Council: The National Research Programme 2023-2028

Compared to the region, Kosovo's low research performance can be attributed to factors such as inadequate research infrastructure, policies, and investment in R&D. Slovenia's higher publication numbers may be attributed to its well-established research infrastructure and supportive policies. At the same time, Kosovo and Albania face challenges related to funding, limited resources, and inadequate support for R&I. The significant disparity between Slovenia and the WB underscores the need for increased investment, supportive policies, and research infrastructure development in the region to enhance scientific productivity and stimulate innovation. Addressing these challenges is crucial for promoting R&D, contributing to the socio-economic progress of Kosovo.

3.5 Innovation performance and university-business collaboration

The available data provided above does not sufficiently demonstrate the innovation potential in Kosovo's industry, indicating the need for significant improvements in institutional capabilities and innovation promotion. Regarding product innovation, the findings for 2019 reveal that Kosovo is relatively close to other economies in the region, with only a slight difference. Regarding process innovation, the results indicate that Kosovo has shown better progress than Montenegro and Albania in 2013 and 2019 (Figure 4). To accurately assess Kosovo's innovation potential at the macro, industry, and firm levels, conducting an innovation survey is essential, mainly focusing on the sectors with the highest potential. Emphasising R&I is crucial for the private sector, and fostering collaboration with private enterprises will increase the number of patents, trademarks, industrial designs, and other innovation indicators.



	2017	2018	2019	2020	2021
Patents	33	21	33	26	16
Trademarks	1575	1716	1731	2128	1950
Industrial designs	25	13	25	12	30

Figure 4: Patents, industrial designs and trademarks applied for in Kosovo 2017-2021
Source: KIPA Annual Report. 2021.

In the current situation, Kosovo is encountering various obstacles and challenges that hinder the development of a strong collaboration between academia and the private sector. These barriers include the following: i) the private sector has limited capacity to absorb and utilise knowledge generated by academia. This is evident due to the lack of internal R&D capabilities and of culture of collaboration with academia in large companies. The SME sector also lacks innovation culture, and there is a need for a dynamic start-up ecosystem that can translate new ideas into viable business models; ii) there is a general scarcity of financial and human resources in academia and the business sector. This shortage of resources hampers the progress of collaborative initiatives between the two industries. Additionally, there is a lack of adequate infrastructure to support joint projects; iii) there is a limited understanding and awareness within the academic sector regarding the specific needs and requirements of the business sector. This knowledge gap hinders the development of relevant research projects and inhibits effective collaboration; iv) the absence of innovative projects that necessitate cutting-edge scientific support, such as testing, modelling, and prototyping, further contributes to the challenges faced in bridging the gap between academia and the private sector.[23]

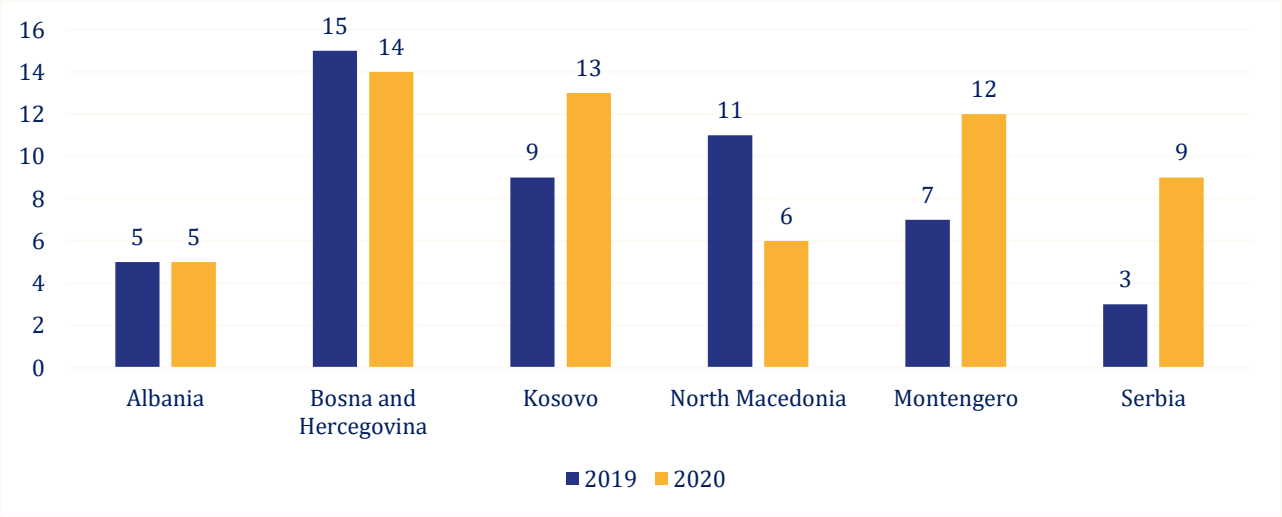


Figure 5: Private sector-university collaboration for innovation (answers "yes" by companies in %)

[23] Kaçaniku et al. (2018). The Situation of Research in Kosovo. Kosovo Education and Employment Network - KEEN

Source: Balkan Barometer (Question asked in the survey: "In the past three years, did you cooperate with any of the universities on R&D or technology development projects to help develop new products or services?")

Collaboration of private companies with universities to produce innovation is very low in the WB. The Balkan Barometer survey (Figure 5) shows that in Bosnia and Herzegovina 15 percent of enterprises stated in 2019 that they cooperated with universities R&D or technology development projects to help develop new products or services in the past three years. In comparison, the share of enterprises in Kosovo in 2019 collaborating with universities in developing new products was 9 percent, with an increase in 2020 to 13 percent. However, the Balkan Barometer survey does not allow us to analyse the quality of these collaborations, ranging from minor cooperations to joint projects.

4 Financing sources, policies and procedures for R&I

Financial sources for R&I and adequate policies and procedures for encouraging fair, transparent and merit-based financing are critical in creating a supportive research environment at both national and institutional levels. Funding R&I is vital for creating a knowledge-based economy and achieving policy targets about private sector competitiveness, Smart Specialisation and other priorities set by the government. With increased policy targets and budget for research, Kosovo needs to make substantial efforts to establish an incentive system that encourages R&I by increasing the participation of individual researchers, research groups, and other research performing organisations.

The financing sources, policies, and procedures for R&I can vary depending on the WB economy, organisation, and specific circumstances. However, common financing sources related to R&I range from government grants to private sector funding and crowdfunding (Box 1).

Box 1: Financing sources for R&I

Government funding: Many governments allocate funds to support R&I initiatives. These funds can be provided through grants, contracts, or specific programmes promoting R&I in various sectors.

Research grants: Research grants are essential for researchers and innovators. These grants are typically awarded by government agencies, foundations, non-profit organisations, or private companies interested in supporting specific research areas or projects.

Venture capital: Venture capital firms invest in early-stage companies with high growth potential, including those involved in R&I. These firms provide funding in exchange for equity or a share in the company's ownership.

Private sector funding: Some companies allocate funds for internal R&D activities or collaborate with external research organisations. This can involve partnerships, joint ventures, or licensing agreements.

Crowdfunding: Crowdfunding platforms allow individuals or organisations to raise funds for their R&I projects by contacting many interested people to support their initiatives.

As noted in the previous section, Kosovo has limited government funding and minimal private funding for R&I, resulting in low research activity. Even more critical, Kosovo does not have a well-established funding system and related policies and procedures. With an expected increase in the proportion of funds allocated to HEI, there is a need to establish a research funding system and install adequate incentive schemes to promote research activities. For these reasons and others, the development of research funding instruments—such as mechanisms for allocating funds to research groups, individuals, and organizations—and the establishment of practical modalities for

implementing these funding mechanisms are key strategic issues in Kosovo's R&I policy. The following section will focus on analysing the current financial and non-financial incentives at the University of Prishtina.

The University of Prishtina's (UP) incentives for research

The UP is the largest and oldest HEI in Kosovo, contributing to most of the research output in Kosovo. The UP developed its first research strategy in 2013 ("The Strategy on Scientific/Artistic Research and Development Activities 2013-2016"). In addition, the UP has adopted the Strategic Plan 2017-2019 and the Strategic Plan 2020-2022). In these strategic documents, the UP considers R&D activities a top priority aiming at supporting its academic units, research groups and individuals engaged in scientific and artistic research. In the most recent document, "Research and Development Strategy of the University of Prishtina (2022-2025)"[24] , the UP has identified five main areas for the development of scientific and research activities: 1) Human resources, 2) Infrastructure, 3) International cooperation, 4) Links to economy and society and 5) Management and organisation. Based on the strategic documents of the UP and interviews with the academic staff, insufficient incentives for the involvement of the staff in research activities remain a vital issue alongside limited human resources. Therefore, changing the contracts between the UP and its academic staff to provide more incentives for research is very important.

The current research incentives at the UP are based on:

a) Promotion of academic staff with new academic titles;
b) Involvement of staff in research projects and increase in collaboration of research institutes within academic units; in addition, the UP already has a tradition of supporting the publication of research results;
c) Direct financial payment/compensation for publication of research results in high-ranked journals;
d) Financing participation in international conferences;
e) Sabbaticals: one-year leave to conduct research in a foreign university;
f) Non-financial incentives such as recognition of publications in social media, certificate of gratitude for excellence in research, etc.

The research centres and institutes of the UP have good experience in commercialising research and consulting services with private companies. However, the income generated from these institutes is channelled back to the central budget of the university. The current financial incentives for these institutes and centres are inadequate to stimulate application for research projects supported by the government, the private sector, and donors.

The institutes of academic units in the UP can be financed by various sources of finance, such as public funds, including the UP budget, project funding, and provision of services for the private sector.[25] Until now, the UP has not directly funded these institutes. For the first time in 2023, there is an initiative to finance two research projects per academic unit/faculty in the total amount of EUR 25,000 per grant. However, the current formulae for financial benefits of institutes and academic staff involved in research projects are unsuitable for motivating research staff. The distribution of the income generated from projects or services is done as follows (see Box 2):

[24] Research and Development Strategy of the University of Prishtina (2022-2025), draft version.
[25] Rregullore per themelimin dhe parimet e funksionimit te instituteve ne Universitetin e Prishtinës, nr. Prot. 2/513, dates 25.10.2013 (transl.: Regulations for the establishment and operating principles of institutes at the University of Pristina). Article 5, Financing.

Box 2: Financial incentives for research institutes and researchers participating in R&I projects at the UP

The total value of income generated (projects or services)	A
Value Added Tax	B
Balance (remaining)	(C=A-B)
Direct Expenses (10%)	(SHD=0.1*C)
	(D=C-SHD)
For University	(U=0.2*D)
For Faculty/academic unit	
A) If services are not conducted in the laboratory	(F=0.1*D)
B) If services are conducted in the laboratory	(F=0.2*D)
For Academic Staff involved in the project	(D-(U+F)

Source: Rregullore per themelimin dhe parimet e funksionimit te instituteve ne Universitetin e Prishtinës, nr. Prot. 2/513, dates 25.10.2013

Based on the formulae, around 40-50% of the income generated will be transferred to the UP and the academic units, depending if laboratories are used or not in conducting the research. While the formulae may work for services for private companies using laboratory services on a commercial basis, it has major negative influences on the staff engagement in research grants supported by the government and particularly by international funding and donors. This income distribution scheme has been purely designed for commercial-based work and services for academic staff. While in donor-based research projects, the profits are not engaged from research grants from any national research fund in EU countries. As a result of this scheme, many income-generating activities, mainly in technical faculties, offer services for the private sector. However, there is no publicly available evidence and data on how the income generated from these projects so far channelled to the UP central budget has been spent or redistributed.

Therefore, three elements are critical for installing decent incentive schemes for R&I:

First, there is a need to differentiate the scheme and avoid a one-size-fits-all formulae. The most critical issue here is to set up a differentiated financing scheme for a) commercial project-based services to the private sector, such as services and consulting, which may involve income for the UP and staff in the form of profit; and b) research-based projects and grants from the government and EU funds; and C) not research-based projects.

Second, there is a need to set up a revolving research fund which will be sourced from the UP budget and the income generated by activities of the institutes and centres. The revenue generated by these activities should be transferred to a particular internal UP research fund for other sub-research grants for academic units, individual research groups and PhD students.

Finally, the bureaucracy involved in all levels of hierarchy may undermine the incentives of the staff to get engaged in research applications and work. The situation will likely improve if these institutes and centres within the UP become independent legal entities for income-generation activities. There is a need to revise bylaws and regulations to change the model based on the best EU practices, allowing more autonomy and strengthening monitoring transparency.

5 Findings from interviews

This section reports the findings from interviews conducted with individual researchers and stakeholders. The discussions have revealed the following areas of challenges for conducting research work:

a) Research capacities of the academic staff

HEI in Kosovo have limited research capacities. In most cases, academic staff research activity is based on individuals' individual and voluntary processes rather than an established institutional approach with well-defined research plans, incentives, and assessment performance to create systematic research capacities and performance. The current obstacles to research activity in Kosovo are related to the research capacities of the academic staff, infrastructure, and research incentives for increased participation in research.

b) Research infrastructure (tools and equipment, laboratories, technology)

A supportive research environment and infrastructure are preconditions for conducting high-quality research. Most of the interviewers, particularly the researchers from natural sciences, complained about the research infrastructure. Research in natural sciences, medicine and other fields requires more intense technology and equipment-related activities, available spaces, laboratories and related equipment, machinery and raw materials and other inputs used in conducting experiments. The discussions and interviews with researchers at the UP revealed the problem with the public procurement of necessary laboratory inputs, which is complicated and not flexible, often resulting in delays in conducting laboratory analysis and achieving research findings. In addition, there is a need for certification of laboratories by internationally accredited institutions, which is required for publishing in internationally ranked journals.

c) Financial incentives

Although there are several financial and non-financial initiatives for academic staff (mainly in public universities), the working load of academic staff is composed primarily of teaching activities. This teaching-based workload usually comes at the expense of the research performance measured by the number of research projects and publications. The research component and activities are not integrated into the HEI activity. As such, the research publications are mainly encouraged by the promotion of the academic staff. The UP professors highly evaluated the recent initiative of the UP to finance research publications (up to two per year per one academic staff). The potential increase of criteria for funding of publications beyond two per academic year could encourage the academic staff to publish highly ranked journals. One of the issues raised during the discussion was the salary ceiling introduced with the new Law on Labour. According to this law, university professors have a salary ceiling and cannot have financial compensation beyond the specific level of wage determined by this law which can undermine any future incentives based on performance-related financial incentives.

d) Intellectual Property Rights

Intellectual property rights (IPR) are another aspect which limits the potential development of research activities. The Intellectual property (IP) of products resulting from knowledge transfer from public universities and their infrastructure to private firms is unresolved. HEI do not have an established IPR system, essential for academic staff and higher education institutions. This may create potential ambiguities over the IP and scientific allocation share of researchers involved in the research projects and work. Different scenarios require the attention of the IPR: research that

does not include university infrastructure and research that relies on extensive use of machines, equipment, laboratories, etc. The EU based practices suggest that in the last situation, when the research project (study) is carried out at the university research infrastructure, the university's cautious participation in IPR is needed to compensate for the cost born from the use of equipment.

Even more important, the IPR is critical in collaborative research projects between universities and the private sector. In conducting the research project with private companies, researchers can also gain insight into corporate details and secrets that cannot be disclosed involving the regulation issues of potential conflict of interest and confidentiality. For all these reasons, it is strongly recommended that all HEI introduce and develop a suitable model of IPR and confidentiality. The future government funds should explicitly make IPR regulation (at research performing organisations) as entry eligibility conditional for access to government funds. The regulation of the IPR system, which is transparent and predictive, will encourage productive research. All these challenges limit the potential of public universities to initiate and implement large-scale research projects and get involved in international research collaboration. The involvement of the UP and other HEI in international projects, including Horizon Europe projects, government research grants, and innovation vouchers, will require a properly installed IPR.

e) The evaluation of research project applications

The credibility of the evaluation of project applications is essential at the government and university levels. It is vital for establishing trustworthiness of the R&I funding agencies. The findings from the focus groups point out four main elements in the evaluation of R&I proposals: fairness and transparency, the need for high-quality criteria in the assessment of projects, quality and independence of evaluators, and procedures for applications. Engaging international experts, especially from the diaspora, is significant and can contribute to the quality, independence, and fairness of the proposal evaluation process. The diaspora's participation is an opportunity for both HEI/university and government-level research grants and to involve world-class experts and evaluators.

f) Digitalisation of the application process

Digitalising the application process for research grants and evaluating these proposals can reduce the administrative cost for any research grant scheme. This process should be based on a well-established peer review system, in which the evaluator has the complete information about applicants and the research team. Still, the applicant does not have information about the evaluator – based on best practices in Europe (e.g., National Science Centre Poland).

g) Research performance assessment framework and R&I statistics at national level

Research performance frameworks (RFP) are very useful tools for policy makers to measure the performance of research organisations and universities. It provides a systematic way to assess and evaluate the quality, impact, and productivity of research. Establishing clear criteria and metrics enables fair and objective evaluation of research performance. RPF are useful for assisting funding agencies (e.g., National Research Fund) in making informed decisions regarding the allocation of research funding. Based on various matrices measuring quality, impact and potential of research projects, funding agencies can direct resources to areas that are likely to yield the most significant results. This helps maximising the return on investment in research and promotes the advancement of knowledge and innovation. The RPF also helps government bodies and other international agencies to conduct a ranking of universities. Furthermore, developing the RFP with specific and measurable criteria promotes accountability and transparency in the application for national research grants. It helps researchers, institutions and funding agencies to demonstrate their

achievements and outcomes to stakeholders, such as government bodies, industry partners and the public. It ensures that research efforts and resources are effectively utilised and that researchers are held responsible for their work. As such, the RPF contributes to evaluating the policy decisions for allocating state budget for various research fields based on the performance of researchers developing a competitive advantage in specific areas, as a system for data collection and statistics for R&I. However, applying the RFP requires a well-established data collection system, which Kosovo needs to improve significantly. Based on the data analysis of the research performance, policy makers can identify and prioritise areas of strategic importance and formulate effective policies and strategies to support and advance research endeavours.

h) Non-financial incentives

The non-financial incentives also are limited at the UP. Previously, in several publicly organised events, the best researchers were recognised formally through the certificate of recognition. Recently, the UP has been very active in promoting the research publications of articles on social media, thus also motivating the academic staff. There is a need to explore innovative ways for non-financial incentives to encourage researchers. For example, EU universities have established for top researchers' honorific titles such as "Ambassador of research".

6 Conclusions and recommendations

The key finding is that research activities in Kosovo are in an early-stage development phase and are primarily the result of individual efforts rather than systematic institutional research. There is a lack of a systematic, well-organised research system at the national and institutional/university levels. Furthermore, there is a need for a regulatory framework to determine the research staff and institutions' engagement modes. To create a supportive research environment, funds for research need to be increased, and policies and procedures for R&I should be modified and established at the national level (such as MESTI) as programmatic policy implementation, and at institutional levels (university or private entities). The following recommendations focus on strengthening incentives for research activities:

- The limited R&I funding hinders the development of R&I capacities and productivity, ultimately affecting Kosovo's competitiveness. Increasing the budget allocated to R&I is crucial. While there has been some improvement, the current allocation of 0.7% of the national budget remains low compared to other economies in the region. There is a need for a further increase, with a target of at least 0.16% of Kosovo's GDP by 2025. These policy targets for R&I funding should be assessed in relation to GDP, as the overall funding for R&I should align with the economic context. Based on estimations and comparisons with other regional economies, Kosovo should aim to meet or exceed the regional average for research funding.
- Establishing the National Research Fund (NRF) or Agency is necessary for developing an effective policy implementation setup. The report outlines that the R&I system in Kosovo lacks this kind of meso-level institution. There is no link between macro-level (research policy) and micro-level (research performers) organisations. Successfully implementing a future increase in the R&I funds requires a well-established NRF. The NRF would be able to enlarge the scope of the policy instruments allocating R&I funds, contributing to the effective implementation of R&I policy.
- The government can promote research by acting as a user of research outputs. The Government should focus at all levels (Ministries, government agencies, local authorities, and others) on evidence-based policymaking, which increases the demand for research

services through open public tenders. The evidence based policy making not only would improve the effectiveness of public policy but also promote research by contracting research organisations such as universities and research performers to supply the required research.

Box 3: Poland sets targets for procurement of R&D and innovative solutions

Poland is an excellent example for creating a demand for research services by the Government. Poland's "State purchasing policy 2022-2025" includes objectives and directions set out in the country's medium-term development strategy. One of the key goals of the policy is to perceive public procurement more as an instrument that increases the level of innovation in the national economy. The new approach introduces the principle of effectiveness of public procurement to ensure that procurers include innovative solutions in their plans and strategies. The policy encourages heads of contracting authorities to take risks in innovation procurement. It also aims at creating interest in potential innovators (i.e. high-tech enterprises with the potential to produce innovative solutions) and attract innovative solutions for the needs of public services. The adoption of targets for R&D procurement and procurement of innovative solutions set the level of ambition for innovation procurements for all public buyers in the country. Individual public buyers are free to establish their own internal objectives in this respect as well as their own incentive mechanisms. Poland's "State purchasing policy 2022-2025" advises all Polish public buyers to allocate 3% of their budget to the procurement of R&D and 20% to public procurement of innovative solutions. This is part of a broader set of measures to stimulate the use of public procurement as an instrument to increase innovation in the economy.

Source: European Commission. (2022). *Poland sets targets for procurement of R&D and innovative solutions*. https://digital-strategy.ec.europa.eu/en/news/poland-sets-targets-procurement-rd-and-innovative-solutions. Accessed May 2023.

- Collaboration of HEI with the private sector will incentivise research activities and help diversify funding sources of research at universities. Closer cooperation with the private sector will also lead to a better understanding of the needs of the business sector and contribute to developing more applied research projects to serve the needs of the private sector. The benefits of such collaboration will go beyond research and will be reflected in improved curricula, teaching, and student placement. Because cooperation with the private sector is in its initial phase of development, joint projects will help to build mutual trust and to increase future cooperation. HEI should build trust and reputation regarding research capacities and output provided to the private sector. Initiatives and policy instruments such as the Innovation Voucher scheme contribute to mutual trust and cooperation, which could be developed purely commercially driven by the demand of the private sector and the supply of high-quality output by research from universities.
- Diversification of policy instruments to support research institutions and researchers is needed. Table 1[26] provides an overview of the potential policy instruments to support research activities targeted to individuals and organisations. Depending on the level of development and policy targets, these instruments can be used in conjunction with each other to produce more research results. Kosovo has a minimal portfolio of tools limited to some career advancement and the voucher scheme.

Table 1: Grouping of objectives, instruments and target groups

Funding objective	Instrument potential	target group

[26] Jacob, M. (2013). Research funding instruments and modalities: Implication for developing countries. *IHERD-the OECD's Programme on Innovation, Higher Education and Research for Development*.

Capacity building	Block grant, project, programme (thematic or open), Centre of Excellence (COE)	Research group, organisation,
Internationalisation	Stipend, project, programme	Individual, organisation
Commercialisation	Award, expert support, venture capital	Research group, organisation, individual
Collaboration between public research organisation and industry	Voucher, R&D tax credit, programme, project, COE	SMEs, large firm
Strategic research (e.g., major challenges)	Project, programme, COE	Research group, individuals, UI consortia
Career Advancement	Project, stipend	Young scholars usually recently graduated PhDs
Career renewal	Project, stipend	Senior research staff, R&D staff

- Evaluation and assessment criteria of project application should be carefully reviewed and adequately defined. Inadequate measures and the lack of qualified and independent evaluators of the research project applications can undermine the research activities and discourage the researchers from applying for projects. Based on the EU's successful examples engaging the formal international peer review facilitates directing competitive research funding to the best projects (see Box 4 for best practices in the EU). Another significant contribution of the international peer review is that it not only brings more independence and quality to the application assessment but also contributes to the quality of Kosovo's R&I system when benchmarked against international standards, maintaining and enhancing national practices.

Box 4: Examples of international peer-review evaluation of research project applications

The Academy of Finland (the Finnish Research Council) is the main Finnish public source of competitive funding for scientific research. Researchers and researcher groups can apply for funding to conduct scientifically ambitious projects and to support careers in research. Applications are screened using a high-level international peer-reviewing process to identify the best and most promising projects. In the case of applications for multi-year research grants, a written review report by an expert panel is asked for. The panel submits one review report per each applicant. The decision-making process takes place in the Academy, and the primary criterion for funding is the outcome of international peer review. The number of funding decisions and the amount of funding depends on the budget available.

More information at: http://www.aka.fi/en/review-and-funding-decisions/

Science Foundation Ireland

Like the Finish example, the Science Foundation Ireland (SFI) has successfully used the international peer reviews R&I funding agency. It funds basic and applied research in the areas of science, technology, engineering, and mathematics. The SFI uses only international peer reviewers for all its competitive research grant programmes. Based on the SFI the provision of funds is highly competitive and international peer-review-based processes ensure that the best projects and researchers at each career stage are supported.

More information at: https://www.sfi.ie/research-news/publications/SFI-Strategy-2025.pdf (p.18)

- The assessment criteria in proposal evaluation should be based on international standards giving weight to the research project by assessing the scientific quality, potential impact and feasibility of the research project, as well as the research capacities of the team (see Annex: Evaluation of the research project). The assessment scoring is based on high-quality

criteria, including the publication track record of the principal investigator. Additionally, the team will actively encourage research staff and organisations to conduct research and publish in internationally reputable journals. Moreover, this will have a positive impact on all HEI, so they need to change the institutional incentives (both financial and non-financial) to incentivise active research staff. This vertical linkage of the incentives is crucial for motivating high-quality research. MESTI should encourage multidisciplinary projects to strengthen the cooperation between researchers or research groups/ departments from different fields/disciplines, including collaborations with the private sector to facilitate the commercialisation and application of research outputs.

- The Research performance framework (RFP) is essential because it enables assessment, accountability, funding allocation, benchmarking, career progression, and evidence-based decision-making in research. It helps ensure quality and impact of research, fosters transparency and accountability, and promotes the efficient allocation of resources for research advancement. To develop any RFP, Kosovo needs to improve the data collection on R&I substantially and also use internationally recognised metrics (e.g. Web of Science & Scopus) for measuring the research performance of institutions. Implementing an effective RFP would assist MESTI in making more informed decisions on allocating research funds and granting agencies in implementing R&I policy instruments.
- The digitalisation of the processes linked to the application and evaluation of the research projects is another element simplifying application procedures, involves less bureaucracy in administering the research grants scheme, and increases transparency. Kosovo made significant steps by introducing the Kosovo Research Information System (KRIS) and further developing the KRIS platform to integrate the modules that enable easier application and evaluation of research funds. The use of digital platforms is very cost-effective and facilitates the engagement of international peer reviewers, including the involvement of diaspora experts as peer reviewers. In addition, this platform can be used effectively to collect R&I data and statistics at the institutional level, which are required for conducting RPF discussed above.
- The lack of inadequate laboratory infrastructure limits the possibility of cooperation between the private sector and universities through other policy instruments expected to be introduced by MESTI (e.g., the Innovation Voucher scheme). Therefore, in the longer term, there is a need for substantial improvement and upgrade of the laboratory infrastructure and technical equipment to increase the range of services that universities can offer for the private sector, government and other potential knowledge and service users. In this context, it was found that in addition to advancing the technological infrastructure and equipment, the licensing of laboratories and relevant institutes for providing services is still needed. Given the limited and outdated research infrastructure, future R&I funding schemes should also be designed to support technology and infrastructure updates.
- For all these reasons, it is strongly recommended that all higher education institutions introduce and develop a suitable model of IPR and Confidentiality. The future government funds should be explicit in making eligibility conditional for access to government funds. The regulation of the IPR system, which is transparent and predictive, will encourage productive research.
- MESTI should prioritise Open Science and Gender equality. Efforts to promote access to knowledge and science, including gender equality, involve various stakeholders, including researchers, institutions, funders, publishers, and policy makers. It requires implementing policies, guidelines, and practices that foster equal opportunities, inclusivity, and fair representation for women and gender minorities in R&I. MESTI can include gender-based

criteria when allocating research funds. It may also fund open-access publications to allow unrestricted access to scientific articles and research findings derived from the research projects funded by MESTI. Open Access can help address inclusion by providing equal access to knowledge and allowing researchers from diverse backgrounds (gender, minority groups) to share and access their work without financial barriers.

- The Government Salary Ceiling for academic staff in public HEI can undermine any incentive scheme when based on financial performance-related pay. Salary ceilings imposed by the new Labour Law for university professors determine the upper-level wage for the total financial remuneration. No academic staff member can receive a wage above that level, hindering potential future financial incentives based on performance.
- Tax cuts for R&I are another policy measure to enhance research activities Kosovo has no tax cuts or other direct fiscal incentives for research. Fiscal incentives based on successful EU examples can be used to support R&D activities in Kosovo. Furthermore, expenditure-based R&D tax incentives are common tools to support research across the OECD region to help address R&D market failures (Box 5). Future policy interventions to support research should consider the incentives such as "research allowance", which permits claiming a percentage of the cost devoted to research projects.

Box 5: R&D Tax Cuts in Germany

Indirect financing of Innovation: R&D tax credit
Expenditure-based R&D tax incentives are common across the OECD region to help address R&D market failures: they accounted for around 55 percent of total government support for business R&D in the OECD in 2017, up from 30 percent in 2000. In 2020, Germany introduced an R&D tax credit for the first time aiming at creating incentives for firms (particularly SMEs) to increase their research expenditure. The tax incentive subsidises business expenditure on R&D (BERD) of up to EUR 2 million each year. As part of the COVID-19 recovery package, the cap was increased to EUR 4 million per firm until the end of 2025, whereupon it will revert to the lower level. The incentive, known as the" Research allowance", permits firms to claim 25 percent of total in-house R&D personnel costs and up to 60 percent of extramural R&D costs for R&D contracts performed by contractors located in the European Economic Area.
(Source: https://www.oecd-ilibrary.org/docserver/50b32331-en.pdf?expires=1684452812&id=id&accname=guest&checksum=7C3209CB1A1BE8BC3D9A30C60AF9D5B8. Accessed May 2023).

Institutional level recommendations

The capacities of research organisations and universities are fundamental to absorb the funds provided by the government and other sources of finance. The research of this report evidences that HEI do not have adequate funding, policies and procedures for stimulating research activities. The following recommendations and interventions are needed to create a supportive research environment at the university level:

- Although the University of Prishtina (UP) made significant efforts to support research activities, the current financing and research incentives are inadequate.
- The management of research activities is highly centralised at the university level, in terms of both financial administration of the project and contracting authority. Research institutes/centres are not legally independent entities, and as such, each application should be made via the central University office, adding bureaucracy to the project application process. Establishing research centres within each academic unit and university department is necessary to enhance research capacities and motivate staff to do research. However, the current regulation of the functioning of the institutes is not supportive and encouraging for researchers and research groups in academic units. **The financial and**

management decentralisation of the institutes by providing more discretionary power to apply and sign contracts directly with the donors, government agencies and other research funding organisations is likely to incentivise research staff.

- **The principles and formula for the income distribution generated through the research institutes undermine the research incentives, especially for the projects that donors or government agencies finance. The scheme has major flaws in income distribution, transferring up to 50 percent of income to the central university budget** which is not used to support research activities. The UP does not have a special fund for supporting research projects; only in 2023 a call for projects was launched for the first time. A "UP Research Fund" should be established, and the income generated by institutes and centres should be completely used for funding other smaller projects.
- Well-established IPR regulations and policies are crucial for conducting R&I. The UP and other HEI do not have IPR regulations. The lack of IP policies that govern intellectual property ownership, protection, and commercialisation of R&I projects hinders R&I activities. The UP and other HEI should implement this kind of policies and define the rights and responsibilities of researchers, inventors, and the institution to IPR. Challenges related to IPR limit the potential of public universities to initiate and implement large-scale research projects and get involved in international research collaboration. In any involvement in international projects, the IPR system is a requirement. In particular, the IPR policy is crucial in collaborative projects with the private sector, which in addition also involves issues of confidentiality and conflict of interest of researchers involved in the project. The involvement of the UP and other HEI in international projects, including Horizon Europe projects, government research grants and innovation vouchers, will require the properly installed IPR.
- The evaluation of the university-level projects should apply the same principles of independent peer review and the involvement of international reviewers at the national level (see above).
- There is a concern about this institution's lack of balance between teaching and research. The universities should change the contract by putting more weight on research activities. This can be done through workload-based contracts, which encourage research-intensive academic staff to decrease teaching load and increase the research through publications, research projects and supervision of PhD students.
- The UP has been very active in promoting publication of research articles on social media, motivating the academic staff. There is a need to explore innovative ways for non-financial incentives to encourage researchers in the future. For example, EU universities have established honorific titles for top researchers such as Ambassador of Research. In many universities, research professors are given the opportunity to have personal research assistants to support them in research work.

7 Annex

Example of the research proposal application criteria

A. SCIENTIFIC QUALITY OF THE RESEARCH PROJECT (A1+A2+A3 = 60%)

A1. SCIENTIFIC QUALITY OF THE RESEARCH PROJECT (30%)

Has the proposal been prepared in a reliable manner? Does the project meet the criteria of basic research? Does the project meet the requirements of a scientific proposal? Next, please assess the scientific relevance, importance, originality, and novelty of research or tasks to be performed; relevance of the research methodology and work plan about the scientific objectives of the project, including (if applicable) appropriate integration of sex and/or gender, green agenda and other priorities in the call for proposals dimension in the project's content; quality ought to be evaluated in an international context.

Scoring:
Low. The research project is of low quality: it does not address an important problem but contains a few elements that could be improved.
Moderate. The project will have some impact on the advancement of the research field(s) or discipline(s) and the project results are likely to be published by academic publishers or journals that are widely recognised.
Good. The research project is of good quality: it addresses an important problem but contains a few elements that could be improved.
High. The research project is of high quality: it addresses a problem of high importance and interest, and no significant elements have to be improved. May have some minor weaknesses.

Justification for A1. SCIENTIFIC QUALITY OF THE RESEARCH PROJECT (30%)

A2. POTENTIAL IMPACT OF THE RESEARCH PROJECT (15%)

POTENTIAL IMPACT OF THE RESEARCH PROJECT

The potential for substantial international impact on the research field(s) and high-quality research publications and other research outputs, considering the specifics of the research field and the variety of forms of impact and output; impact ought to be evaluated using an international context

Scoring
Low. The project will have limited impact on the advancement of the research field(s) or discipline(s) and the project results are not likely to be published by academic publishers or journals that are widely recognised.
Moderate. The project will have some impact on the advancement of the research field(s) or discipline(s). The project results are likely to be published by academic publishers or journals that are widely recognised.
Good. The project will have an impact on the advancement of the research field(s) or discipline(s), and the project results are likely to be published by academic publishers or journals that are internationally recognised.
High. The project will have a significant impact on the advancement of the research field(s) or discipline(s) and the project results are likely to be published by academic publishers or journals that are widely recognised and well-established in Web of Science

Justification for A2. POTENTIAL IMPACT OF THE RESEARCH PROJECT (15%)

A3. FEASIBILITY OF THE RESEARCH PROJECT (15%)

FEASIBILITY OF THE RESEARCH PROJECT

The feasibility of the proposed project, including the appropriateness of the research methodology to achieve the goals of the project, the risk management description, the principal investigator's qualifications, the structure of the research team, research facilities and equipment, international cooperation (if any), other factors affecting the feasibility of the project

Scoring:

Low. The implementation of the project is not planned well, it contains gaps or shortcomings, or it leaves plenty of room for improvement with respect to: the proposed timescale and methodology, project risks and mitigation plan, the qualifications of the research team, the allocation of research tasks or the available research facilities and equipment.

Moderate. The implementation of the project is reasonably planned, but it contains some gaps or shortcomings, or it leaves room for improvement with respect to: the proposed timescale and methodology, project risks and mitigation plan, the qualifications of the research team, the allocation of research tasks or the available research facilities and equipment.

Good. The implementation of the project is planned well, but it contains very few shortcomings, or it leaves room for improvement with respect to: the proposed timescale and methodology, project risks and mitigation plan, the qualifications of the research team, the allocation of research tasks or the available research facilities and equipment.

High. The implementation of the project is very well planned: the proposed timescale and methodology are relevant and suitable to achieve the goals of the project; project risks and mitigation plan are clearly described; the qualifications of the research team and the allocation of research tasks are appropriate; the available research facilities and equipment are sufficient for the proposed research.

Justification for A3. FEASIBILITY OF THE RESEARCH PROJECT (15%)

B. QUALIFICATIONS AND SCIENTIFIC ACHIEVEMENTS OF THE PRINCIPAL INVESTIGATOR (40%)

QUALIFICATIONS AND SCIENTIFIC ACHIEVEMENTS OF THE PRINCIPAL INVESTIGATOR

evaluation of whether the academic track record was drafted in a reliable manner, then evaluation of the scientific achievements of the principal investigator in the past 10 years, taking the following into account: the DORA recommendations, the stage of scientific career, career breaks, and the diverse range of research outputs evaluated from an international perspective, in particular: (1) important contribution to the field(s) or discipline(s), (2) up to 10 most important publications from the academic and research track record, with up to 3 of them attached to the proposal as PDF files; for research in art, up to 10 most important artistic achievements and achievements in research in art from the academic and research track record, (3) research performance and research outputs (publications, datasets, software, etc.) of previous grants, (4) presentations to internationally established conferences, including invited talks, (5) scientific or

artistic prizes/awards or membership in well-regarded international organisations, (6) international recognition, (7) other research activities

Low. The scientific track record and research achievements are very low and no recognition in the field(s) in terms of quality and contribution to science, the publication and artistic track record and other research activities. The principal investigator has no recognition in the research field(s). **Moderate.** The scientific track record and research achievements are average and of limited recognition in the field(s) in terms of quality and contribution to science, the publication and artistic track record and other research activities. The principal investigator has limited recognition in the research field(s). **Good.** The scientific track record and research achievements are good; however, they are of limited international recognition in terms of quality and contribution to science, the publication and artistic track record and other research activities. The principal investigator has limited international recognition in the research field(s). **High.** The scientific track record and research achievements are very good; they are regarded as of international recognition in terms of quality and contribution to science, the publication and artistic track record and other research activities. The principal investigator has international recognition in the research field(s).

Justification for B. QUALIFICATIONS AND SCIENTIFIC ACHIEVEMENTS OF THE PRINCIPAL INVESTIGATOR (40%)

Final remarks for proposal

Strengths of the proposal

Weaknesses of the proposal

Final scores = A (A1+A2+A3) +B=60%+40%=100%

POLICY ANSWERS

ABOUT POLICY ANSWERS

POLICY ANSWERS (R&I POLICY making, implementation ANd Support in the WEsteRn BalkanS) supports policy coordination in the Western Balkans and with the EC and the EU. 14 partner organisations, representing network nodes in the region and EU expert organisations, support policy dialogue through formal meetings (such as ministerial and steering platform and ad-hoc policy meetings), monitoring and agenda setting, capacity building and implementation of the EU's Western Balkan Agenda, as well as the alignment of thematic priorities. The project implements regional pilot activities and offers an information hub based on the westernbalkans-infohub.eu online information platform. The partners provide analytical evidence via monitoring and mapping activities of the stakeholder ecosystem, of the implementation of the Western Balkans Agenda and of the Western Balkans' integration into the European Research Area as well as via strategic foresight. POLICY ANSWERS also allows for tailored and targeted capacity building activities in the Western Balkans as well as regional alignment of priorities in relation to the digital transformation, the green agenda and towards healthy societies. Pilot activities provide learning opportunities on policy and programme level and reach out to final beneficiaries related to improved academia-industry cooperation, researcher mobility, inclusion of youth in policy processes, promotion of research infrastructures and increased innovation skills in all areas.

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