An Assessment of **University-to- Society Collaborations in Albania**

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EXECUTIVE SUMMARY

Historically, universities have held an important role in society, serving not only as centers of knowledge, research, and innovation, but also preparing generations of new entrants in the labor force. However, societal changes of the last century and rapid technological developments have led to an evolution of the labor market and have caused a shift in expectations towards universities. Additionally, socio-economic phenomena and adverse events, such as those caused by the COVID-19 pandemic and the climate emergency, are exerting further pressures on universities, urging them to transform and innovate.

Universities have responded to these pressures by embracing the so-called 'Third Mission', a concept that sees them as complex, multidisciplinary, and evolving actors, contributing not only to education and research, but also to social, economic, and cultural development. Universities also embraced the Triple Helix Model of cooperation among university, industry, and government, acting as intermediaries of innovation efforts and promoting a knowledge-based society. Considering the important role that civil society and media play in societal development, the Triple Helix Model was later expanded with additional dimension, transforming into the Quadruple Helix, which includes university (science), government (policy), industry, and civil society and the media.

In Albania, universities face considerable challenges in terms of quality of research, transfer of knowledge, collaboration with external stakeholders, and generation of innovation with impact. Although, part of important EU schemes, universities in the country still struggle to effectuate meaningful collaboration with other actors in society and in generating added value in developmental process.

This research study seeks to assess the current levels and practices of collaborations between universities and other actors in Albania, and to provide recommendations for enhancing future interactions with stakeholders in policy, business, and civil society. It utilizes a combined methodology approach of mixed methods: survey and document analysis for quantitative data collection, and in-depth interviews and focus groups for qualitative data collection.

The research study shows that in Albania there is little collaboration between universities and other actors that is well-institutionalized, sustainable, funded, and promoted. Most of the existing collaborations take place

with the business sector, followed by those with civil society and policy, and less so with the media. Most of the collaboration is established on an individual level, apart from collaboration with the policy sphere where the majority of collaboration happens on an institutional level.

Findings from this research study indicate that the main factors that hinder university-to-society collaboration include low funding or research, lack of information and knowledge about university research activities, academic offer, and innovation. In addition, lack of strategy (by all actors) for pursuing collaborative projects in a sustainable manner and outdated curricula seem to be hindering factors in fostering university-to-society collaboration.

Most collaborations remain donor-dependent and are project-based, rather than forming a crucial part of the vision and strategy of involved actors. Limited drivers and incentives for researchers to engage in collaborations with other actors also affect the level and frequency of collaboration.

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PROJECT SNAPSHOT

Project Title	University-to-Society Innomediaries in Albania: Co-Production of Knowledge and Research That Matters
Project's Acronym	U-SIA
Webpage	www.usia.al
Project's Budget	EUR 861,570.00
Funded by	Erasmus+ Programme of the European Union
Agreement Number	618997-EPP-1-2020-1-AL-EPPKA2-CBHE-JP
Project Timeline	15/01/2021- 15/01/2023
Project Coordinator	Qendra Mesdheu - Mediterranean University of Albania
Countries Involved	Albania; Serbia; Italy; Germany
Project Partners	1. Mediterranean University of Albania (UMSH) 2. Chamber of Commerce and Industry of Tirana (CCIT) 3. Professional College of Tirana (KPT) 4. Luigj Gurakuqi University of Shkodra (ULGSH) 5. European University of Tirana (EUT) 6. Aleksandër Moisiu University of Durres (UAMD) 7. National Agency for Science, Research, and Innovation (AKSHKI) 8. Center for Comparative and International Studies (CCIS) 9. Science and Innovation for Development Center (SCIDev) 10. University of Belgrade (UB) 11. University Degli Studi di Marconi (USM) 12. Accreditation Council for Entrepreneurial & Engaged Universities (ACEEU)

Aim and Objective	The overall objective is to foster effective and sustainable university-to-society collaboration in Albania with impact on the development and European integration process of the country. Specifically, the project intends to: SO1 – enhance the capacities of universities in Albania to co-produce knowledge and research with impact through establishment of knowledge transfer and innovation brokerage unit (USIA). SO2 – introduce and expand co-production of knowledge that is academically insightful and practically actionable in Albanian context through establishment of network of partners in Quadruple Helix model (QH).
Results	By the end of the project, universities in Albania will have enhanced and developed capacities to co-produce knowledge and research with impact and more effective and sustainable collaboration in place between Albanian universities and public institutions, business, civil society, and media in the Quadruple Helix Model.

ABBREVIATIONS

AI	Artificial Intelligence
EU	European Union
EC	European Commission
ERA	European Research Area
GoA	Government of Albania
HE	Higher Education
HEI	Higher Education Institution
ICTs	Information and Communication Technologies
KT	Knowledge Transfer
MoESY	Ministry of Education, Sport and Youth
NASRI	National Agency for Scientific Research and Innovation
OECD	Organization for Economic Cooperation and Development
UIIN	University Industry Innovation Network
R&D	Research and Development
R&I	Research and Innovation
SDGs	Sustainable Development Goals
USC	University-to-Society Collaborations
UBC	University-Business Collaborations

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I. INTRODUCTION

This section briefly presents the research background, its aim and objectives, and outlines the structure of the report.

1.1 Background

Higher education, research, and innovation are areas with immense potential in bringing added value to the economy and society. Collaboration of universities with other stakeholders in society, such as industry/business, government/policy and civil society, can contribute to the development of human capital and talents, to the creation of sustainable innovation ecosystems, and to building a strong knowledge-based economy and resilient societies. Albania has only recently started to develop policy instruments to enhance university-to-society collaborations. Universities in Albania are undergoing major transformative processes and are yet to consolidate their role in economy and society.

Like other economies in the Western Balkans, Albania is part of key European programmes that support higher education, research, and innovation, such as Erasmus+, European Solidarity Corps, Creative Europe, and Horizon Europe. The European Union has placed the Western Balkans as a priority region in the new Digital Education Action Plan, the European Education Area, and the European Research Area. However, Albanian universities face considerable challenges in terms of quality of research, transfer of knowledge, collaboration with external stakeholders and generation of innovation with impact.

Against this backdrop, a consortium of partners from academia, policy, business, and civil society came together to develop a project proposal for the Erasmus+ Programme of the European Union, with the aim of fostering effective and sustainable university-to-society collaboration in Albania, with impact in the development and European integration process of the country. Led by the Mediterranean University of Albania and in partnership with 11 other partners in Albania, Italy, Serbia, and Germany, the "University-to-Society Innomediaries in Albania: Co-Production of Knowledge and Research That Matters" Project (USIA) will promote the Quadruple Helix Model in Albania and support five partner universities in establishing and enhancing Knowledge Transfer & Innovation Brokerage Units.

This report is the result of the Work Package 'Preparation' of USIA Project, managed by the Science and Innovation for Development (SCiDEV) Centre. The goal is to assess the current collaborations between universities and external stakeholders in Albania to inform the other Work Packages and activities of the USIA Project.

1.2 Aim and Objectives

This research study seeks to assess the current levels and practices of collaboration between universities and other actors in the Albanian society, and to provide recommendations for enhancing the interactions among universities and external stakeholders in policy, business, and civil society.

The specific objectives are:

(i) Analyze the current practices of collaboration in the five partner universities of USIA project;

(ii) Identify enabling and hindering factors for university-to-society collaborations; and,

(iii) Provide recommendations for customizing USIA project activities based on research findings and broader recommendations for stakeholders in the Quadruple Helix.

1.3 Structure of Report

Following the introduction, the second chapter presents the methodology approach, process, and concrete methods used for the data collection and analysis. The third chapter provides a brief theoretical framework on the role of universities, Third Mission, collaboration with stakeholders, and the Quadruple Helix model. The fourth chapter sets the context of the research by examining the policy and legal framework of university-to-society collaborations in Albania. The fifth chapter presents the research findings, followed by analysis and discussions. The final chapter presents conclusions and recommendations for USIA project and stakeholders.

II. METHODOLOGY

This chapter focuses on the methodology approach and process, methods used for the data collection, sample of the research study and its merits and limitations.

2.1 Approach

This research study utilizes a combined methodology approach of mixed methods. This implies the systematic integration of quantitative and qualitative data within a single research study.[1] The mixed methods approach allows for a more complete and synergistic utilization of both qualitative and quantitative data by compensating the shortcomings of each of them. This research study uses a rigorous procedure in collecting and analyzing the quantitative and qualitative data appropriate per each method and ensuring an adequate sample size. In addition, it integrates the data during the process of data collection, analysis, and discussion. Data are collected within the same timeframe and are validated through triangulation. This research study uses a convergent parallel design whereby the quantitative and qualitative strands of the research are performed independently, and their results are brought together in the overall interpretation, analysis, and discussion. This is then enriched also by document analysis and secondary data.

Outlined in Figure 1 below, the methodology process highlights the participatory approach of the research by discussing and finalizing the research design with partner universities in the USIA Project and validating the findings in workshops dedicated to each partner university.

2.2 Methods

This research study uses survey and document analysis for quantitative data collection, and in-depth interviews and focus groups for qualitative data collection.

Quantitative Data Collection

For the purposes of this research study, a survey is a systematic method for collecting data from a sample of entities for the purposes of understanding their attitudes, behaviours, opinions, and beliefs for a certain research topic. Two questionnaires were developed

1 Schoonenboom, J & Johnson, R. B "Mixed methods research is the type of research in which a researcher or team of researchers combines elements of qualitative and quantitative research approaches (e.g., use of qualitative and quantitative viewpoints, data collection, analysis, inference techniques) for the broad purposes of breadth and depth of understanding and corroboration." Kolner Zeitschrift "How to Construct a Mixed Methods Research Design" Fur Soziologie und Sozialpsychologie No.69 Suppl 2 (Springer:2017) p. 107–131 Available at: https://doi.org/10.1007/s11577-017-0454-1 or https://www.ncbi.nlm.nih.gov/pmc/articles/PMC5602001/) (last accessed- September 2021)

Figure 1:

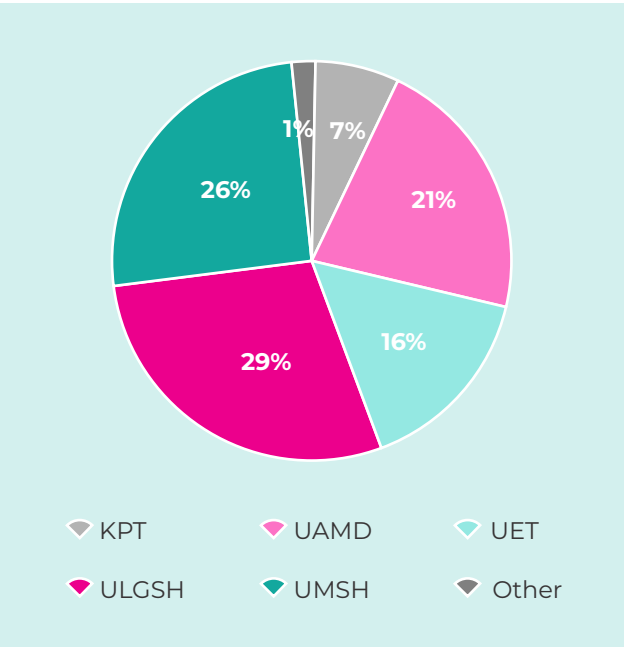
Methodology process for assessing university-to-society collaborations

Desk Research	• Theoretical framework on Quadruple Helix • Policy and legal context on university-to-society collaborations in Albania • Briefing workshop with team of researchers & USIA partner universities to finalise research design
Quantitative Data Collection	• Design of survey, pilot testing, and launch of online surveys for (i) individual researchers; and, (ii) institutions • Data collection: individual researchers and partner universities
Qualitative Data Collectionn	• Design of in-depth interviews and focus group guidelines • Conducting in-depth interviews/focus groups with Quadruple Helix stakeholders: university, business, policy, civil society, and media
Analysis and Write Up of Report	• Integration of quantitative and qualitative data • Presentation of findings to partner universities through validation workshops • Drafting conclusions and recommendations for USIA • Publication of the final report

for this research: one for individual academics, researchers, lecturers, and staff at the partner universities, and one for the higher education institutions participating in the project (partner universities). The questionnaires, drafted in Albanian, were pilot tested and then revised to reflect feedback, particularly in terms of length and logic of questions per each section. A total of 219 individual participants from 5 partner universities (Mediterranean University of Albania (UMSH), Professional College of Tirana (KPT), Luigj Gurakuqi University of Shkodra (ULGSH), European University of Tirana (EUT), and Aleksandër Moisiu University of Durres (UAMD)) responded to the questionnaire in May 2021. A total of 5 institutional questionnaires were filled in.

Figure 2:

Distribution of responses to the questionnaire for individual research across partner universities (N=219)



In terms of characteristics of the achieved sample, the vast majority (92.70%) of respondents are academics: researchers and lecturers. Of these, 31% hold Doctor of Sciences title, 12% hold PhDs, 14% are Associated Professors, and 5% Professors. 65.80% have completed their doctoral studies in Albania.

Table 1:

Completion of doctoral studies

Doctoral studies	Percentage
Albania	65.80%
Albania and mobility outside	4.10%
EU	13.70%
USA	0.90%
Other	14.5 %

Figure 3:

Respondents' role in university

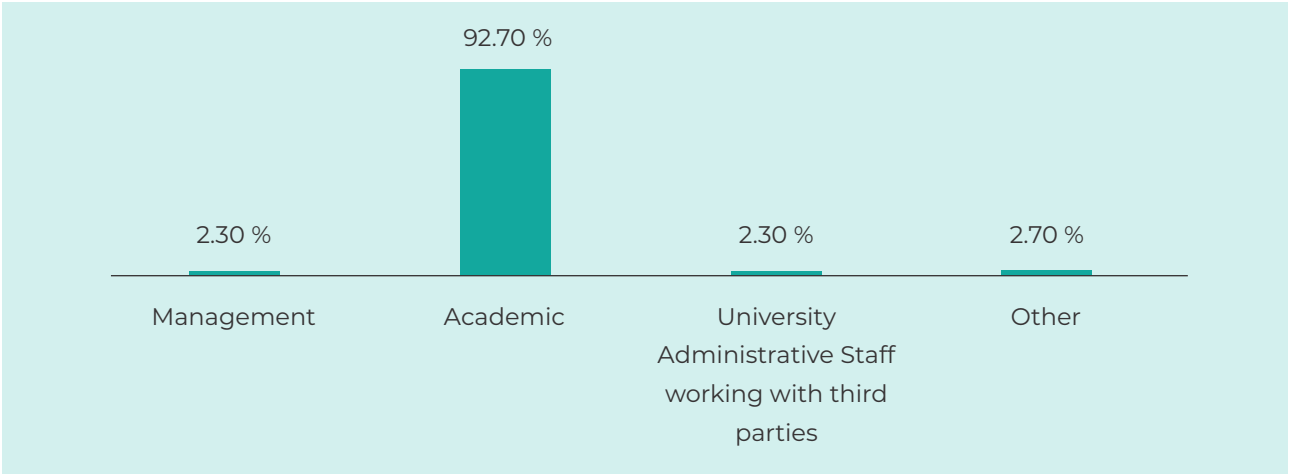


Table 2:

Field of expertise of individual questionnaire respondents

Fieldof expertise	Percentage
Communication sciences and linguistics	5.50%
Development studies, geography, and environmental planning	0.90%
Economic studies, management, and business	26.90%
Education	6.80%
Law	14.60%
Media and journalism	0.90%
Political science and international relations	5.50%
Psychology	4.10%
Social anthropology	0.50%
Sociology	1.40%
Social science	4.60%
Mathematics, informatics, statistics	11.90%
Other	16.40%

About a third of the respondents list economic studies, management, and business as their primary field of expertise, followed by law, STEM (science, technology, engineering, and math) and other subjects as shown in Table 2. This result is in line with the profile of the participating partner universities, where the respondents are employed.

In-depth Interviews

In-depth interviewing is a qualitative research technique that involves conducting intensive, individual interviews with a small number of respondents to explore their perspectives on a particular idea, program, or situation. For this research, this entails in-depth, semi-structured interviews with key representatives from

Table 3:

Distribution of in-depth interviews

In - depth interviews with academics	5
In - depth interviews with policy makers	2
In - depth interviews with civil society/think tanks	3
In - depth interviews with businesses (owners, managers, entrepreneurs)	6
In - depth interviews with media	1
Total	17

Table 4:

Summary table of focus groups

	Institution convening the focus group	Date	Total participants	Participants' breakdown			
				Research/ University	Business	Media	Policy-makers
1	Professional College of Tirana (KPT) Mediterranean	06/02/2021	19	14	5		
2	University of Albania (UMSH) Luigj Gurakuqi	06/04/2021	30	21	6	1	2
3	Iuniversty of Shkodra (ULGSH) Aleksandër Moisiu	06/07/2021	12	9	1	1	1
4	University of Durres (UAMD)	06/09/2021	20	11	1	4	4
5	European University of Tirana (UET) Chamber of	06/10/2021	13	10	3		
6	Commerce and Industry Tirana (CCIT)	06/16/2021	15		15		

each partner in the Quadruple Helix model: universities, business sector, policy makers, civil society, and media. A total of 17 in-depth interviews were conducted during April to May 2021.

Focus Groups

Focus group discussion is a qualitative method to gain an in-depth understanding of a research topic. The method aims to obtain data from a purposely selected group of individuals, examining discussions stemming from group dynamics. For this research study, six focus groups were organized in June 2021, for a combined total of 109 participants. They were all stakeholders from the Quadruple Helix model: universities, business sector, policy makers, civil society, and media. Table 4 provides a breakdown of participants in each focus group.

Overall, a total of 345 individuals participated in the research across all methods used. There was very limited overlapping of participants between the focus groups and in-depth interviews with only two researchers taking part in both. However, as the online survey was anonymous, there is no way to track whether some of the responding researchers might have participated in focus groups and in-depth interviews as well. The preliminary findings were validated through workshops held with each partner university. The insights from the five validation workshops were incorporated into the final report.

Finally, throughout the research study, *document analysis* was conducted, and secondary resources were consulted to support the qualitative and quantitative data with further evidence.

2.3 Merits and Limits

This research study offers a comprehensive overview of the university-to-society collaborations in Albania by focusing on the four helices: university, business, policy and civil society and media as one. In addition, it captures the perceptions of the demand (business and policy) and supply (academia) side, respectively, regarding the current practices of collaborations and how they can be improved in the future.

The combination of methods for collecting and analyzing both quantitative and qualitative data serves to underpin the hindering and enabling factors of collaboration. The mixed method approach gives a voice to the experiences of research participants, thus enabling a rich and comprehensive analysis. Finally, another merit of the mixed method approach is that it offers flexibility to contextualize the research in line with the USIA project aim.

Yet, this research study presents some limits. It is focused only on five partner universities of the USIA Project and does not capture the entire spectrum of higher education in Albania. Nonetheless, the participating universities represent a mixture of public (UAMD and ULGSH) and private universities (UET and UMSH), as well as a higher education institution offering vocational and professional study programs (KPT). Three of these institutions are located in Tirana and two in other regions of country (Durres and Shkodra), thus offering a more representative approach.

Lastly, it is worth noting that the complexity of the research topic requires a multidisciplinary team of researchers and additional resources to complete the data collection.

III. THEORETICAL FRAMEWORK

This chapter provides a conceptual framework for the research by placing university-to-society collaborations into contemporary discussions. Due to space and scope limitations, this chapter does not attempt to provide an exhaustive account of university-to-society collaborations, rather than highlighting the key issues that are interrelated to the research aim and USIA project. Hence, this chapter investigates the role of university in society, the evolving Third Mission of universities, the shift towards entrepreneurial university and the Triple Helix model, and the expansion towards engaged universities in the Quadruple Helix model. Finally, some considerations about the future of universities are provided.

3.1 Repositioning the Role of Universities in Society

Universities have traditionally generated knowledge, research, and innovation, but they are currently facing multiple challenges and are redesigning their role in society given the many unprecedented crises confronting them. The emergence, development, and the rapid proliferation of advanced information and communication technologies (ICTs) have significantly transformed almost all dimensions of our contemporary society leading to its conceptualization as a knowledge-based society/economy.[2] The transition towards knowledge societies/economies is repositioning the role of the university and transforming the academic profession.[3] Because a knowledge-based society is focused on knowledge production and generation of innovation in complex networks in order to address multifaceted challenges, universities –the very institutions of knowledge and research– have also had to undergo profound transformations.

The main assumption is that universities will have to embrace a new, more socially and civic engaged role, and market-oriented role based on cooperation in diverse networks in order to be able to address issues affecting modern society, triggered by rapid technological development, economic and social changes[4], climate change, the COVID-19

2 Erion Curraj, Blerjana Bino et al "New dynamics in the interrelations between research and development in Albania: From National Innovation System towards the Triple Helix" (Tiranë:UET) p.1-5 Available at: https://www.triplehelixconference.org/th/11/bic/docs/Papers/Curraj.pdf (last accessed- September 2021)

3 Timo Aarrevaaram, Martin Finkelstein, Glen A. Jones, Jisun Jung "Universities in the Knowledge Society The nexus of national systems of innovation and higher education" Volume 22 (Springer: The changing academy –the changing academic profession in international comparative perspective:2021) p.1-434 Available at: https://www.springer.com/gp/book/9783030765781 (last accessed- September 2021)

4 Carita Lilian Snellman "University in Knowledge Society: Role and Challenges" Journal of System and Management Sciences Vol. 5 No.4 (Finland: ISSN :2015) p.84-113 Available at: http://www.aasmr.org/jsms/Vol5/No.4/JSMS-VOL5-NO4-5.pdf (last accessed- September 2021)

Box 1: **Third Mission of universities**

The Third Mission is the relationship between universities and stakeholders from the non-academic world. The Third Mission is the sum of all activities concerned with the generation, use, application, and exploitation of university knowledge, capabilities, and resources, outside of the academic environment. This collaboration between academia and society at large will seek to contribute to the social, cultural, and economic development of communities (Compagnucci & Spigarelli, 2020).

pandemic, etc. Universities are expected to enhance ways of producing knowledge and provide education and research that meets the demands of a knowledge-based society for high-quality research, and education that guarantees wide access to knowledge, continuous knowledge production, and equal opportunities to all for lifelong learning.[5]

3.2 The Ever Evolving *Third Mission* of Universities

The above-mentioned challenges have pressured universities to expand their role from education and research into a more active contributor to society. This has been labelled as the Third Mission of universities, alongside the 'first mission' of teaching and the 'second mission' of conducting basic research. The Third Mission of universities is a complex, multidisciplinary, and evolving concept, linked to the social and economic mission of universities in a broad sense.[6] Over the past three decades, it has developed to include models such as the 'entrepreneurial university', 'technology transfer' and 'Triple Helix Model (THM) partnerships'.[7] Universities embarking on the Third Mission have become not only generators of education and research, but also contributors to the social, economic, and cultural development of the regions in which they operate by transferring knowledge and engaging with stakeholders in business, policy, and society at large. By now, the assumption that universities must play a role in society beyond education and research is well established and articulated clearly in policy because of the dialogue among university, industry, government, and society.[8]

The Shift Towards Entrepreneurial University

The term "entrepreneurial university" was coined by Etzkowitz in 1983, referring to the transition from research university-to-entrepreneurial university originated in the USA with the primary examples of the Massachu-

5 ibid

6 Lorenzo Compagnucci , Francesca Spigarelli "The Third Mission of University : A systematyc literatura review on potentials and constraints" Technological Forecasting and Social Change Volume 161 (Elsevier:2020) p.1-30 Available at: https://www.sciencedirect.com/science/article/pii/S0040162520311100 (last accessed- September 2021)

7 Trencher, G., Yarime, M., McCormick, K., Doll, C, Kraines, S., & Kharrazi, A. "Beyond the Third Mission: Exploring the Emerging University Function of Co-creation for Sustainability" 41(2) (Lund University: Science and Public Policy:2014) p. 151-179. Available at: https://portal.research.lu.se/portal/files/3123266/4393557.pdf (last accessed- September 2021)

8 Paola Giuri,Frederico Munari,Alessandra Scandura,Laura Toschi "The strategic orientation of universities in knowledge transfer activities" Technological Forecasting and Social Change Vol.138 (Elsevier:2019) p. 261-278 Available at: https://www.sciencedirect.com/science/article/pii/S0040162517304870 (last accessed- September 2021)

Box 2: **Entrepreneurial shift of universities and the EU**

The entrepreneurial shift has been promoted and fostered by governments and international organisations by introducing measures to support this transformation. The European Union promotes entrepreneurship in education. Entrepreneurship is supported through several actions under the Erasmus+programme, HEInnovate for higher education institutions and Horizon Europe for engaging with business sector. OECD has published a Guiding Framework for Entrepreneurial Universities.

setts Institute of Technology (MIT) and Stanford University.[9] They were the first institutions to expand their traditional missions of teaching and research to include more applied research with commercial relevance into their programmes. They also started to transfer knowledge to the non-academic environment, as well as provide support to industry.[10] Various studies have since highlighted that the entrepreneurial university is a model of the Third Mission, which prioritizes a set of activities, based on the combination of academic and business imperatives, by broadening both the inputs to academic knowledge and its use in an economic and societal context.[11]

Knowledge Transfer As A Key Function of Universities

The Third Mission entails the active engagement of universities in knowledge-transfer activities as crucial generators of innovation and economic development for regions where universities operate. OECD defined knowledge transfer (KT) as the multiple ways in which knowledge from universities and public research institutions can be exploited by firms and other organizations to generate economic and social value and industry development.[12] Universities engage in knowledge transfer by creating new knowledge from research, nurturing specialized human capital, and by transferring technology from academia to industry.[13] Knowledge transfer includes, among others, the commercialization of academic knowledge, patent activity, the linkage between industry and universities, license agreements and the creation of spin-offs. Universities may address various objectives through KT activities, such as providing services to faculty, enhancing innovation and the practical use of research results, generating additional income streams, fostering local economic development, complying with national and institutional policies, and promoting public value.[14] The increased focus on innovation as a key driver

9 H. Etzkowitz "The evolution of the entrepreneurial university" (Int.J Technol Globalization:2004) p.64-77 Available at: https://www.inderscienceonline.com/doi/abs/10.1504/IJTG.2004.004551 (last accessed- September 2021)

10 Lorenzo Compagnucci, Francesca Spigarelli "The Third Mission of University: A systematyc literatura review on potentials and constraints" Technological Forecasting and Social Change Volume 161 (Elsevier:2020) p.1-30 Available at: https://www.sciencedirect.com/science/article/pii/S0040162520311100(last accessed- September 2021)bib0098 (last accessed- September 2021)

11 ibid

12 OECD "Commercialising public research New Trends and Strategies" (Paris: Organization for Economic Cooperation and Development:2013)

13 Lorenzo Compagnucci,Francesca Spigarelli "The Third Mission of University : A systematyc literatura review on potentials and constraints" Technological Forecasting and Social Change Volume 161 (Elsevier:2020) p.1-30 Available at: https://www.sciencedirect.com/science/article/pii/S0040162520311100 (last accessed- September 2021)

14 Barry Bozeman, Heater Rimes, Jan Youtie "The evolving state-of-the-art in technology transfer research: Revisiting the contingent effectiveness" Research Policy Volume 44 Issue 1(Elsevier:2015) p. 34-49 Available at: https://www.sciencedirect.com/science/article/abs/pii/S0048733314001127 (last accessed- September 2021)

Box 3: **University-Industry Innovation Network**

University-Industry Innovation Network is committed to enhancing employability and driving innovation through university-industry engagement. UIIN is a knowledge leader on university-industry interaction, entrepreneurial universities and are dedicated to the future of higher education institutions and their impact on society. UIIN conducts research, organize events and provide training and consultancy services to our community of 100+ organizational and 500+ individual members. They are lately engaged in Albania providing capacity building to innovation ecosystem stakeholders: Masterclass on Future of Universities and the Skills of Boundary Spanners, provided by UIIN in collaboration with Crazy Town and the Gesellschaft für Internationale Zusammenarbeit (GIZ) and supported by EU for Innovation.

for our societies is influencing every single university mission. As project-based learning and co-creation in research move into the mainstream of university activities, the Third Mission becomes increasingly an integrated part of both the research and education missions.[15]

3.3 Triple Helix Model

The Triple Helix Model implies that universities act as intermediary organizations to engage with external stakeholders, to innovate and to foster a knowledge-based society.[16] The Triple Helix Model of the intertwined university-industry-government relationship highlights the importance of both systemic coordination between these actors and their dynamics.[17]

The Triple Helix model postulates that, in a knowledge-based society, the boundaries between public and private sector, science and technology, university and industry are increasingly fading, giving rise to a system of overlapping interactions: (a) industry operates as the center of production; (b) government acts as the source of contractual relations that guarantee stable interaction and exchange; and (c) universities are the source of new knowledge and technology.[18] Moreover, each sphere, while retaining its primary role and identity, "takes the role of the other." For example, universities take the role of industry in supporting start-up creation in incubator and accelerator projects.[19]

3.4 Quadruple Helix Model

Universities' ability in orchestrating multi-actor innovation networks has given them a pivotal role in post-industrial economies and societies centered on knowledge creation. Businesses and governments see the university and its members as ideally suited for this,

15 Thomas Jorgensen "Universities and innovation beyond the third mission"(European Universities Association:2019) "Available at: https://eua.eu/resources/expert-voices/88:universities-and-innovation-beyond-the-third-mission.html (last accessed- September 2021)

16 Loet Leydesdorff "The Triple Helix of University-Industry-Government Relations" (Amsterdam: University of Amsterdam:2012) p.1-17 Available at: https://www.leydesdorff.net/th12/th12.pdf (last accessed- September 2021)

17 Lorenzo Compagnucci,Francesca Spigarelli "The Third Mission of University : A systematyc literatura review on potentials and constraints" Technological Forecasting and Social Change Volume 161 (Elsevier:2020) p.1-30 Available at: https://www.sciencedirect.com/science/article/pii/S0040162520311100 (last accessed- September 2021)

18 Pique, J.M., Berbegal-Mirabent, J. & Etzkowitz, H. "Triple Helix and the evolution of ecosystems of innovation: the case of Silicon Valley" (Triple Helix 5:2018) Available at: https://triplehelixjournal.springeropen.com/articles/10.1186/s40604-018-0060-x (last accessed- September 2021)

19 Ibid

because they are impartial, driven by curiosity and long-term perspectives, rather than by commercial interests and short-term goals. To do so effectively, the university must be highly responsive, adaptable, strategically directed, autonomously governed, and densely interlinked with its regional partners as well as an international network.[20]

In this light, the Quadruple Helix model can be seen as an enhancement of the Triple Helix perspective that highlights the importance of society participating in research and innovation. It not only focuses on the actors from academia (science), government (policy), and industry, but also recognizes the increased role played by civil society.[21] The fourth helix in the Quadruple Helix consists of the following components or attributes: the 'media-based and culture-based public'[22], 'civil society', and 'arts, artistic research, and arts-based innovation'.[23] It could also be paraphrased as the dimension of democracy (knowledge democracy) or the dimension of knowledge society in the context of democracy.[24]

The Quadruple Helix model stresses the importance of having a diversity of agents, actors, and organizations: universities, small and medium-sized enterprises, and major corporations, arranged along fluid and heterogeneous innovation networks and knowledge clusters.[25] The model can be understood as a network of relationships (actors, resources and activities), where public and private organizations interact in value-creating processes to transform various inputs into valuable outputs for themselves and others.[26]

Understanding the importance and value of application of this model, more and more governments are prioritizing greater public involvement in innovation processes.[27] This is important because the Quadruple Helix can serve as 'multi-focal lens' under which to think of growth and regional innovation through

20 Sybille Reichert et al "The Role of Universities in Regional Innovation Ecosystems" European University Association (Belgium:EUA:2019) Available at: https://eua.eu/downloads/publications/eua%20innovation%20ecosystem%20report%202019-3-12.pdf (last accessed- September 2021)

21 Nina Hasche, Linda Höglund, Gabriel Linton "Quadruple helix as a network of relationships: creating value within a Swedish regional innovation system" Journal of Small Business & Entrepreneurship, Vol. 32, No. 6 (Sweden: Routledge Taylor and Francis Group:2020) p.523-544 Available at: https://www.tandfonline.com/doi/full/10.1080/08276331.2019.1643134?scroll=top&needAccess=true (last accessed- September 2021)

22 Elias G. Carayannis, David F.J. "Mode 3' and 'Quadruple Helix : toward a 21st century fractal innovation ecosystem Campbell" Int. J. Technology Management, Vol. 46, No. 3/4 (Inderscience Enterprises Ltd:2009) p. 201-234 Available at: https://edisciplinas.usp.br/pluginfile.php/3572572/mod_resource/content/1/8-carayannis2009.pdf (last accessed- September 2021)

23 Elias G. Carayannis Campbell, D.F. "Developed democracies versus emerging autocracies: arts, democracy, and innovation in Quadruple Helix innovation systems" Journal of Innovation and Entrepreneurship 3, No.12 (Springer Open: 2014) Available at: https://innovation-entrepreneurship.springeropen.com/articles/10.1186/s13731-014-0012-2 (last accessed- September 2021)

24 ibid

25 Elias G. Carayannis, David F.J. "Mode 3' and 'Quadruple Helix: toward a 21st century fractal innovation ecosystem Campbell" Int. J. Technology Management, Vol. 46, No. 3/4 (Inderscience Enterprises Ltd:2009) p. 201-234 https://edisciplinas.usp.br/pluginfile.php/3572572/mod_resource/content/1/8-carayannis2009.pdf (last accessed- September 2021)

26 Nina Hasche, Linda Höglund,Gabriel Linton "Quadruple helix as a network of relationships: creating value within a Swedish regional innovation system" Journal Of Small Business & Entrepreneurship, Vol. 32, No. 6 (Sweden: Routledge Taylor and Francis Group:2020) p.523-544 Available at: https://www.tandfonline.com/doi/full/10.1080/08276331.2019.1643134?scroll=top&needAccess=true (last accessed- September 2021)

27 Florian Schütz, Marie Lena Heidingsfelder, Martina Schraudner "Co-shaping the Future in Quadruple Helix Innovation Systems: Uncovering Public Preferences toward Participatory Research and Innovation" She Ji: The Journal of Design, Economics, and Innovation Volume 5, Issue 2 (ScienceDirect:2019) p.128-146 Available at: https://reader.elsevier.com/reader/sd/pii/s2405872618301394?token=31abb855e591800c3f0c3571398d28cfa44823750b50dd59dd57981af4455a5476f1aa0730e7b9db78197a2be1fa806f&originregion=eu-west-1&origincreation=20210815174707 (last accessed- September 2021)

smart specialisation strategies.[28] Smart, sustainable, and inclusive growth is the key goal of several EU initiatives, strategies, and programmes in the short, medium, and long term, and at the regional, national, and pan-European levels.

Research and Innovation for Smart Specialization

The European Commission introduced the Smart Specialization Strategy (S3) concept in the EU Cohesion Policy 2014-2020 as an 'ex-ante conditionality' for European regions to obtain funding for research and innovation from the European Regional Development Fund (ERDF).[29] Smart Specialization Strategy (S3) is a place-based innovation policy concept to support regional prioritization in innovative sectors, fields or technologies through the 'entrepreneurial discovery process (EDP)', a bottom-up approach to reveal what a region does best in terms of its scientific and technological endowments.[30] Smart Specialization Strategy (S3) requires regions to have a comprehensive understanding of their regional institutional contexts to identify their strongest research, innovation and entrepreneurial assets so that they can select a limited number of priorities where they can build critical mass in areas of comparative advantage.[31]

Universities are expected to play a leading role in the smart specialization strategy process. According to the European Commission, universities and regional authorities have a unique opportunity to form close partnerships that, together with industry and other stakeholders, can maximize the use of EU Structural Funds for research and innovation to deliver economic and social development.[32] Universities should be recognized as a vital partner for regions in the design and implementation of successful Research and Innovation for Smart Specialization Strategies (RIS3).

Albania registered in the Smart Specialization Platform (S3P) in November 2017. Its smart specialization process is currently being prepared with assistance from Directorate-General for Neighborhood and Enlargement Negotiations (DG NEAR) and the Joint Research Centre (JRC). The S3 process will follow JRC's methodological framework for smart specialization in the EU enlargement and neighborhood countries.[33] Albania is currently mapping economic, innovative, and scientific potential. The preliminary priorities for RIS3 are ICTs, tourism and blue growth, energy, especially renewable

28 Elias G. Carayannis, Rakhmatullin, R. "The Quadruple/Quintuple Innovation Helixes and Smart Specialisation Strategies for Sustainable and Inclusive Growth in Europe and Beyond" Journal of the Knowledge Economy No.5 (SpringerLink:2014)p. 212–239 Available at: https://link.springer.com/article/10.1007/s13132-014-0185-8 (last accessed- September 2021)

29 Dominique Fora, John Goddard, Xabier Goenaga Beldarrain, Mikel Landabaso, Philip McCann,Kevin Morgan Clair Nauwelaers, Raquel Ortega Argilés "Guide to Research and Innovation Strategies for Smart Specialisation (RIS 3) (Luxembourg: European Union: 2012) p.1-120 Available at: https://ec.europa.eu/regional_policy/sources/docgener/presenta/smart_specialisation/smart_ris3_2012.pdf (last accessed- September 2021)

30 Policy Learning Platform on Research and Innovation "A Policy Brief -Smart Specialisation Strategy(S3)" (European Union: European Regional Fund:2020) p.1-22 Available at: https://www.interregeurope.eu/fileadmin/user_upload/plp_uploads/policy_briefs/Smart_Specialisation_Strategy__S3__-_Policy_Brief.pdf (last accessed- September 2021)

31 Ibid

32 EUA- REGIO/JRC Smart Specialisation Platform expert workshop "The role of universities in Smart Specialisation Strategies" (Brusseles: European University Association:2014) p.1-32 Available at: https://eua.eu/downloads/publications/report%20on%20joint%20eua-regio%20the%20role%20of%20universities%20in%20smart%20specialisation%20strategies.pdf (last accessed- September 2021)

33 European Commsision "Smart Specialisation Platform-Albania" (EU Commision:2020) Available at: https://s3platform.jrc.ec.europa.eu/en/albania (last accessed- September 2021)

Box 4: **Science shops**

Science Shops can be an effective model for developing mutually beneficial relationships between academia and society. By working together to find solutions to societal issues, students/researchers get to work on real-life problems and civil society organisations get access to research expertise and new knowledge. SciShops will build an extensive knowledge base by analysing the practices of the existing European and International Science Shops. The goal is to engage community stakeholders in knowledge cafes and other community events to provide examples of the benefits of community-based research. The developed strategies and novel tools provided by the project, including a knowledge hub, a SciShops navigator, twinning and matchmaking platform, seek to provide guidelines for different types of organizations on how to establish and run a Science Shop.

energies.[34] The Smart Specialization Strategy for Albania is expected to be adopted in 2022. Active participation in EU research and higher education programmes as well as the ongoing development a Smart Specialization Strategy is expected to strengthen Albania's national research and innovation eco-system.

3.5 Civil Society as a Major Actor in Quadruple Helix Model

A core component of the Quadruple Helix model is the role of civil society in research and innovation. Traditionally, civil society and the publics have been deemed as passive recipients of research findings and innovations. Also, historically, epistemological tension can be observed between knowledge production in universities versus popular knowledge of laypersons. The necessity to address multiple social, economic, and environmental challenges requires the partnership between universities as 'knowledge producers' and civil society as 'practitioners' to assume critical importance.[35] Hence, a new approach has gained in prominence over the last two decades, asserting that research trajectories must be legitimized among relevant publics, aim at positive public impact, and be defined with the publics' help.[36]

The assumption is that the participation of societal stakeholders, such as civil society organizations and individual citizens, will contribute to a more sustainable impact of research and innovation. The initial model conceptualized included a spiral of four strands – academia, business, policy, and society. Later studies argue that the four core components of an innovation system are not involved in unidirectional push-pull relationships, but rather in multi-layered, dynamic, bi-directional interactions.[37]

34 Florensa Haxhi et al "Smart Specialisation Process in Albania" (IPA CBC Italy-Albania-Montenegro:2021) p.1-9 Available at: https://www.regione.puglia.it/documents/606680/1059701/Sabg+-Conference+-+Florensa+Haxhi.pdf/d55adf11-2741-15d0-944d-b3683aea92f5?t=1611659992106 (last accessed- September 2021)

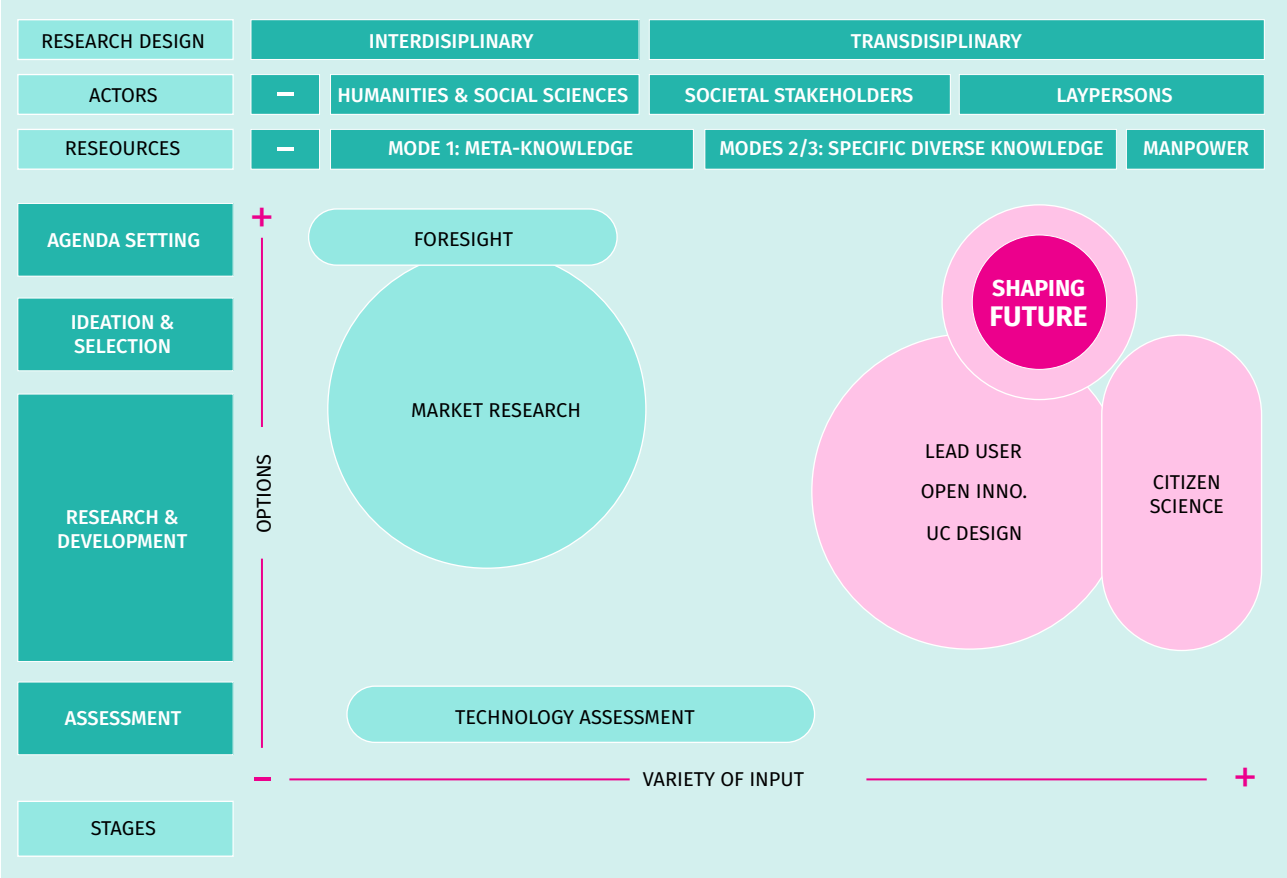
35 Rajesh Tandon et al "University-Civil Society Relations: Partnership of Respect "(South Africa:Durban:2017) p.1-8 Available at: https://unescochair-cbrsr.org/pdf/presentation/5_Durban_Pub%20Lecture%20May%202017.pdf (last accessed- September 2021)

36 Florian Schütz , Marie Lena Heidingsfelder, Martina Schraudner "Co-shaping the Future in Quadruple Helix Innovation Systems: Uncovering Public Preferences toward Participatory Research and Innovation" She Ji: The Journal of Design, Economics, and Innovation Volume 5, Issue 2 (Sciencedirect:2019) p.128-146 Available at: https://www.sciencedirect.com/science/article/pii/S240587261830139 (last accessed- September 2021)

37 Ibid

Figure 4:

Role of society in research and innovation



Source: CeRRI

Civil society organizations and public at large contribute to transfer of knowledge to society. In addition, civil society can contribute to the expansion of the models of 'engaged' teaching and research. At the same time, universities re-assert their role in social, economic, and cultural development through engagement with civil society actors. Finally, the partnership between universities and civil society is expected to produce new knowledge for sustainable development. Challenges remain in the enhancement of the partnership between universities and civil society in terms of resources, power dynamics, full acceptance of action-oriented participatory research and different approaches in solving social, economic and policy issues.

Some argue that universities are going beyond the Third Mission by collaborating with diverse social actors to create societal transformations in the goal of materializing sustainable development in a specific location, region, or societal sub-sector.[38] Partnerships and collaboration between academia, industry, government, and civil society are thus increasingly seen as a pre-requisite for tackling various sustainability challenges as demonstrated in the example below. This still evolving mission differs significantly to the economic focus of the third mission and conventional technology transfer practices.[39]

38 Trencher, G., Yarime, M., McCormick, K., Doll, C, Kraines, S., & Kharrazi, A. "Beyond the Third Mission: Exploring the Emerging University Function of Co-creation for Sustainability" 41(2) (Lund University: Science and Public Policy:2014) p. 151-179. Available at: https://portal.research.lu.se/portal/files/3123266/4393557.pdf (last accessed - September 2021)

39 Ibid

Box 5: **Citizen Science in the EU**

EU-Citizen.Science is an online platform for sharing knowledge, tools, training, and resources for citizen science – by the community, for the community. The vision for the platform is to serve as a Knowledge Hub, in aid of the mainstreaming of citizen science, and build on the growing impact of citizens participating in research across the full range of scientific enquiry.

The mission of the European Citizen Science Association, the European umbrella organisation for citizen science, is to connect citizens and science; to promote sustainable development through citizen science; and to ensure that citizen science contributes to policy processes. The European Citizen Science Association (ECSA) has characterised citizen science based on the ECSA 10 Principles of Citizen Science for good practice.

Citizen Science

Citizen Science broadly refers to the active engagement of the public in scientific research tasks. Citizen Science is a growing practice in which scientists and citizens collaborate to produce new knowledge for science and society.[40] It fosters an open and participatory approach to science, reducing the distance between science and society, and contributing to the goal of an inclusive society. Together with public and private actors, citizen scientists can play a role in developing society, improving communities, and promoting public participation.[41]

Citizen Science is increasingly acknowledged by the political level in the European Union. Policy makers recognize the potential of Citizen Science as an innovative approach to engage with civil society, as well as a precious source of information supporting EU environment-related policies addressing the Sustainable Development Goals[42] and beyond.[43] Not only are scientific outcomes appreciated, but also the increase of scientific literacy as such is supported.[44] Citizen Science accordingly plays a role in national education programmes as well as in European research and innovation policy. For instance, the Joint Research Centre (JRC), the European Commission's science and knowledge hub, examines the use and practices of Citizen Science for EU policies. This work includes the identification and development of methodologies and tools that interconnect Citizen Science with selected policy areas and demonstrates their use and usefulness in the different phases of the policy cycle.[45] Since 2011, several Citizen Science proj-

40 Vohland K. et al. "The Science of Citizen Science" Editorial: The Science of Citizen Science Evolves (Springer:2021) p.1-12 Available at: https://link.springer.com/chapter/10.1007/978-3-030-58278-4_1 (last accessed- September 2021)

41 Ibid

42 United Nations 2030 Agenda "17 Goals" (UN: Department of Economic and Social Affairs/ Sustainable Development:2018) Available at: https://sdgs.un.org/goals (last accessed- September 2021)

43 Vohland K., Schade, S, "Survey on Citizen Science Strategies and Initiatives: report on outcomes in Europe: Technical Report on Outcomes" (European Commission: Ispra:2021)p. 1-47 Available at: https://ec.europa.eu/jrc/communities/sites/default/files/jrc123471_exploring_citizens_science_strategies_and_initiatives_jrc_for_publication.pdf (last accessed- September 2021)

44 European Commision "The Science Of Citizen Science" (EU Science Hub:Springer:2021) Available at: https://ec.europa.eu/jrc/en/science-update/science-citizen-science (last accessed- September 2021)

45 European Commision "Eu Citizen Science" Available at: https://eu-citizen.science/organisation/74 (last accessed- September 2021)

Box 6: **Citizen science in the Balkans**

In terms of Citizen Science in the Balkans, a recent study reveals that citizens are asked to participate through making observations and collecting data with the use of different apps. While most of the projects are active mainly on a local or national scale, a great number of them are part of wider European EC-funded initiatives. Most activities address the public. A few of them target more specialised groups, such as school communities (teachers and students) or particular audiences (e.g. hunters, divers, etc.). Citizen science projects are organised and coordinated either by university organisations and research centres or by other types of organisations, such as foundations, associations, and NGOs. For instance, in Albania, Co-Plan, through participation in the EC-funded 'Green Lungs for Our Cities' Project, seeks to create a bottom-up monitoring platform for air quality, noise pollution, and urban greenery at the local level, in the cities of Tirana, Durres, Elbasan, and Shkodra.

ects have been supported by the EU's Seventh Framework Programme (FP7), as well as under Horizon 2020.

Citizen Science opens many scientific and societal opportunities. The engagement of citizens in scientific endeavors and their contributions to scientific knowledge boost learning and personal development. Communities of citizen scientists can learn from each other and jointly strengthen the field by building networks.[46] However, an imbalance in funding programmes and infrastructures still exists in Europe.

3.6 Science Communication: Engagement with Publics

Science communication can be understood as the engagement of scientists and institutions in sharing science and research with diverse audiences. Effective science communication is the sharing of science-related knowledge whereby one's efforts have a palpable impact on knowledge users.[47] The dissemination paradigm sees science communication as a matter of (successfully) transmitting information about science from scientific experts to the public. The most prominent views assume that the transmission is to be effectuated through education in a formal school setting or (re)education through mass media.[48] The focus for most models of science communication in the public participation paradigm is on facilitating two-way communication, that is, dialogue and (sometimes) deliberation between the public, experts, and policymakers.[49]

46 European Commision "The Science Of Citizen Science" (Eu Science Hub:Springer:2021) Available at: https://link.springer.com/chapter/10.1007/978-3-030-58278-4_3 (last accessed- September 2021)

47 T. W. Burns, D. J. O'connor, S. M. Stocklmayer "RESEARCH Perspective: Science Communication: A Contemporary Definition" Public Understanding of Science" No.12 (Sage Publications:2003) p.183-202 Available at: https://journals.sagepub.com/doi/10.1177/09636625030122004 (last accessed- September 2021)

48 Klemens Kappel, Sebastian Jon Holmen "Why Science Communication, and Does It Work? A Taxonomy of Science Communication Aims and a Survey of the Empirical Evidence" Science and Environmental Communication (Frontiers:2019) Available at: https://www.frontiersin.org/articles/10.3389/fcomm.2019.00055/full (last accessed- September 2021)

49 John Gastil "Designing Public Deliberation at the Intersection of Science and Public Policy" The Oxford Handbook of the Science of Science Communication (Oxford: Oxford University Press/Handbooks:2017) Available at: https://www.oxfordhandbooks.com/view/10.1093/oxfordhb/9780190497620.001.0001/oxfordhb-9780190497620-e-26 (last accessed- September 2021)

Box 7: **Science Communication and Public Engagement Training – British Council in Albania**

In early 2021, British Council is Albania held a Science Communication and Public Engagement Training for young researchers. The training programme aimed to improve the capabilities of early career researchers to effectively communicate science and engage with wider public. The training was part of the Western Balkan Science Engagement Programme (SEP) financed and implemented by the British Council. The programme aimed to contribute to resilience of states, communities, and citizens across the Western Balkans to the COVID-19 pandemic and its adverse impacts by using and promoting science and scientific evidence.

Traditionally science communication has been primarily the responsibility of trained science communicators, outreach and marketing coordinators in universities, and journalists with the aim to translate complex concepts and research findings into stories that are easily understood by lay persons.[50] Today, scientists themselves often engage in some form(s) of science communication beyond peer-to-peer communication such as with policy, business, civil society and public at large. Generally, science communication is done voluntarily, but more so it is becoming a crucial component of research grants (open access, open science, dissemination, and visibility requirements), even a specific institutional requirement for some researchers as part of tenure and promotion evaluations. Scientists lack training on how to communicate effectively and across different platforms including mass media and digital media, but also alternative forms of communicating research funding. Also, journalists need specific training on how to cover and communicate about science.

3.7 Future of Universities

The Future of Universities ThoughtBook "Universities During Crisis" of the UIIN[51] builds on various perspectives of international thought and practice leaders to create a vision for the future of higher education institutions and how they will impact their communities during times of crisis. These contributions highlight the need for more entrepreneurial thinking and acting, resilience, agility, and the ability to adapt. They also envision a need for other modes and types of learning, more lifelong learning, blended learning, and curriculum provided in collaboration with industry. This publication argues for socially engaged universities that are more open to the world, ultimately targeting the wider society and aiming at impacting it in a more meaningful way for the society. The university carries a social responsibility in our society through educating our talent, researching new knowledge, and addressing global challenges in collaboration with external stakeholders.[52] Through anchoring universities in the regions, they become ideally positioned to function as local problem-solvers and value creators.

50 Steven J. Cooke, Austin J. Gallagher, Natalie M. Sopinka, Vivian M. Nguyen, Rachel A. Skubel, Neil Hammerschlag, Sarah Boon, Nathan Young, and Andy J. Danylchuk "Considerations for effective science communication" FACETS No. 2(Canada: Facets: 2017) p. 233-248 https://www.facetsjournal.com/doi/10.1139/facets-2016-0055 (last accessed- September 2021)

51 For more see https://uiin.org/ .

52 The Future of Universities ThoughtBook "Universities During Crisis" of the UIIN, p. 18.

Box 8: **Science communication study: Albania and Serbia**

A study on science communication in Albania and Serbia shows that science communication is not yet understood as an integral part of a scholar's work. Both scholars themselves and institutions have often little understanding of what is entailed by science communication and/or remain sceptical towards it. This includes limited training for both journalists and scholars in science journalism, or policy communication and on how to ensure research reaches the desired audience. The best-developed area is the promotion of science communication towards peers with greater emphasis on international publications. However, beyond some incentives in the case of Serbia, there is little support and infrastructure provided. Abuse is rife as the internationalization strategies only gradually distinguish between reputable and predatory publications. The larger social challenges feed into science communication as well. This affects policy making, characterized by high level of suspicion and lack of communication between policy makers and scholars. It also applies to the public sphere, which lacks a tradition of science communication – few media are committed to communicating about recent scholarship.

The OECD report on University-Industry Collaboration: New Evidence and Policy Options[53] argues that emerging policy approaches to knowledge transfer include support for science-industry knowledge co-creation, which implies the joint creation of knowledge by industry, civil society, and research by means of joint labs, joint research projects, and others. In addition, this includes the creation of intermediary organizations that help match supply and demand for new technologies such as R&D centers, business incubators and others. Third, this collaboration includes the use of new forms of open digital innovation enabled by digital platforms and the development of spin-offs. Thus, governments need to add and strengthen policy instruments for knowledge co-creation, digital innovation, and academic spin-offs. These policy instruments need to be contextualized by responding to specific needs.

In light of the revitalized ERA, the EU set out a stakeholder-driven, strategic vision 2030 for the future of universities in Europe in research and innovation. The vision is underpinned by European values, such as respecting institutional autonomy and academic freedom, scientific and research excellence by exploiting universities' investments in fundamental research, delivering societally-relevant research, maintaining trust, equality of opportunity and inclusivity, and openness based on reciprocity from third countries (e.g. through open science, open access and open data approaches in which Europe excels).[54] In order to help achieve the vision of the ERA (and thus strengthen the EU's scientific and technological bases), the EU will support the transformation of universities in Europe and surrounding research systems throughout the EU, so that they are effective generators and transmitters of trusted knowledge and innovation and developers of talent, and so that the university

53 OECD "University-Industry Collaboration New Evidence and Policy Options" (Paris: OECD:2019) p.18 Available at: https://read.oecd-ilibrary.org/science-and-technology/university-industry-collaboration_e9c1e648-en(last accessed- September 2021)page18 (last accessed- September 2021)

54 Eu Commision Research and Innovation "Towards a 2030 vision on the future of universities in the field of R&I in Europe" (European Union:EU COMMISION:2020) p.200 Available at:https://ec.europa.eu/info/publications/towards-2030-vision-future-universities-field-ri-europe_en (last accessed- September 2021)

sector, through its research and innovation function, plays its part in addressing key societal challenges.[55] The EU seeks to strengthen higher education institutions and their surrounding ecosystems through the European universities alliances, to improve access to excellence for all institutions.[56] Also, it aims to support the transformation of universities in Europe to become catalyzers of knowledge and innovation, and developers of talent.[57] The EU emphasizes that research, innovation and education are key drivers for overcoming challenges and paving the way towards a sustainable, green and digital future and the need for synergies across sectors and disciplines to build a more sustainable knowledge-based economy and resilient society by engaging citizens.

55 Ibid, p. 30

56 European Commision "Speech by Commissioner Mariya Gabriel at the European R&I Days 2021" (Brussels: EU Commision:2021) p.2 Available at: https://ec.europa.eu/commission/presscorner/detail/en/SPEECH_21_3166 (last accessed- September 2021)

57 Ibid.p.3

IV. LEGAL AND POLICY CONTEXT

This chapter provides an overview of the legal and policy context in Albania regarding university cooperation with other actors in society.

4.1 The Legal Framework Regulating the Higher Education and Scientific Research Sector

The Albanian higher education system has gone through a series of reforms. The most recent of these began in 2013-2014 with the aim of increasing the quality of higher education institutions, closing down several study programs and institutions that did not meet accreditation criteria. This reform aimed at improving the governing architecture of higher education, the organization and functioning of higher education institutions (HEIs), and funding mechanisms, in an effort to: (i) expand and improve the quality of education and scientific research and innovation in Albania, in line with the overall national developmental priorities and in compliance with European Higher Education Area (EHEA)[58] standards, (ii) integrate Albanian scientific research in the European Research Area (ERA)[59], and (iii) guide scientific research towards market needs by strengthening the links with the business sector. It culminated in 2015 with the adoption of the Law No. 80/2015, "On Higher Education and Scientific Research in Higher Education Institutions in the Republic of Albania"[60] (hereinafter Law No. 80/2015).

One of the underlying goals of the Law No. 80/2015 was to streamline scientific research in higher education institutions (HEIs) by introducing a number of structural changes, including a new research governance configuration, implementing paths of professional advancement in academia based on engagement with scientific research, and a new structure of financing that sought to orient allocation of institutional funding among public universities based on their relative performance vis-à-vis each other and the respective demand for admissions by prospective students. Particularly important was the institutional redesign of the National Agency of Scientific Research and Innovation (NASRI) as the key agency

58 The European Higher Education Area (EHEA) is a unique international collaboration on higher education and the result of the political will of 49 countries with different political, cultural, and academic traditions, which, step by step during the last twenty years, built an area implementing a common set of commitments: structural reforms and shared tools. https://www.ehea.info/ (last accessed- September 2021)

59 European Commission "The European Research Area (ERA) is the ambition to create a single, borderless market for research, innovation, and technology across the EU"(European Commission:2021) Available at: https://ec.europa.eu/info/research-and-innovation/strategy/strategy-2020-2024/our-digital-future/era_en(last accessed- September 2021)what (last accessed- September 2021)

60 Ministry of Education and Sports of Albania "The Albanian Law No. 80/2015"Available at: https://arsimi.gov.al/wp-content/uploads/2018/07/aktet_nenligjore.pdf (last accessed- September 2021)

dealing with the funding of scientific research. Details of the institutional ecosystem are discussed in the next subsection.

It is important to note that, conceptually, this reform made a distinction between scientific research that takes place inside the university system vs. that which takes place outside. Thus, there has been no recent update on the legislation that governs scientific research in its entirety. In fact, the sector is still governed by Law No. 7893, dated 22.12.1994, "On Science and Technological Development", which needs to be revised to ensure compatibility with national and international standards, particularly with those of the EU. At the time of writing this report, discussions were taking place on a draft law "On Scientific and Research Activity Outside the Higher Education System in the Republic of Albania" that was expected to undergo deliberations by the end of 2021. The academic and scientific communities in Albania have been critical of the Law No. 80/2015 and its bylaws. The long delays in adopting the latter created confusion and frustration among the university administration. Furthermore, university researchers expressed concern about the vision of the law, which placed too much responsibility on universities to raise research funding, in a context where universities staff is overburdened with teaching, and existing research skills and infrastructure put them at a disadvantage to compete for international funding.

4.2 The Institutional Ecosystem Around Higher Education and Scientific Research

Science and innovation fall under the domain of multiple policy institutions, but primarily so under the portfolio of the Ministry of Education, Sport and Youth (MoESY)[61], which is responsible for drafting and implementing legislation and policies pertaining to (higher) education, scientific research, and innovation; proposing the state budget for higher education and scientific research to the Council of Ministers; and supporting scientific research and innovation and development activities in public HEIs.

Figure 5 presents the broader ecosystem of all institutions, agencies, and bodies involved in scientific research.

The National Agency for Scientific Research and Innovation

For the scope of this report, we focus on the role of the National Agency for Scientific Research and Innovation (NASRI), which was transferred under the authority of MoESY in the latest reform. Regulated by Law No. 80/2015 and DCM No. 607, dated 31.8.2016[62], NASRI's mission is to promote scientific research and innovation through supporting, monitoring, assessing programmes and projects in the field of science, technology, and innovation, as well as managing and updating the national database for scientific research and innovation. The agency is funded by the state budget and other donors, including funds of EU programmes and projects, individual states and partner organizations, donations of natural and legal, local and foreign entities as well as any other lawful funding.

61 As of September 2021 is the Ministry of Education and Sports

62 Decision No. 607 "On the establishment, composition, organization and functioning of national agency for scientific research and innovation (Akkshi)" (Council of Ministers:2016) Available at: https://unitir.edu.al/wp-content/uploads/2021/04/53.Vendimi-I-KM-Nr.-607-dat%C3%AB-31082016.pdf (last accessed- September 2021)

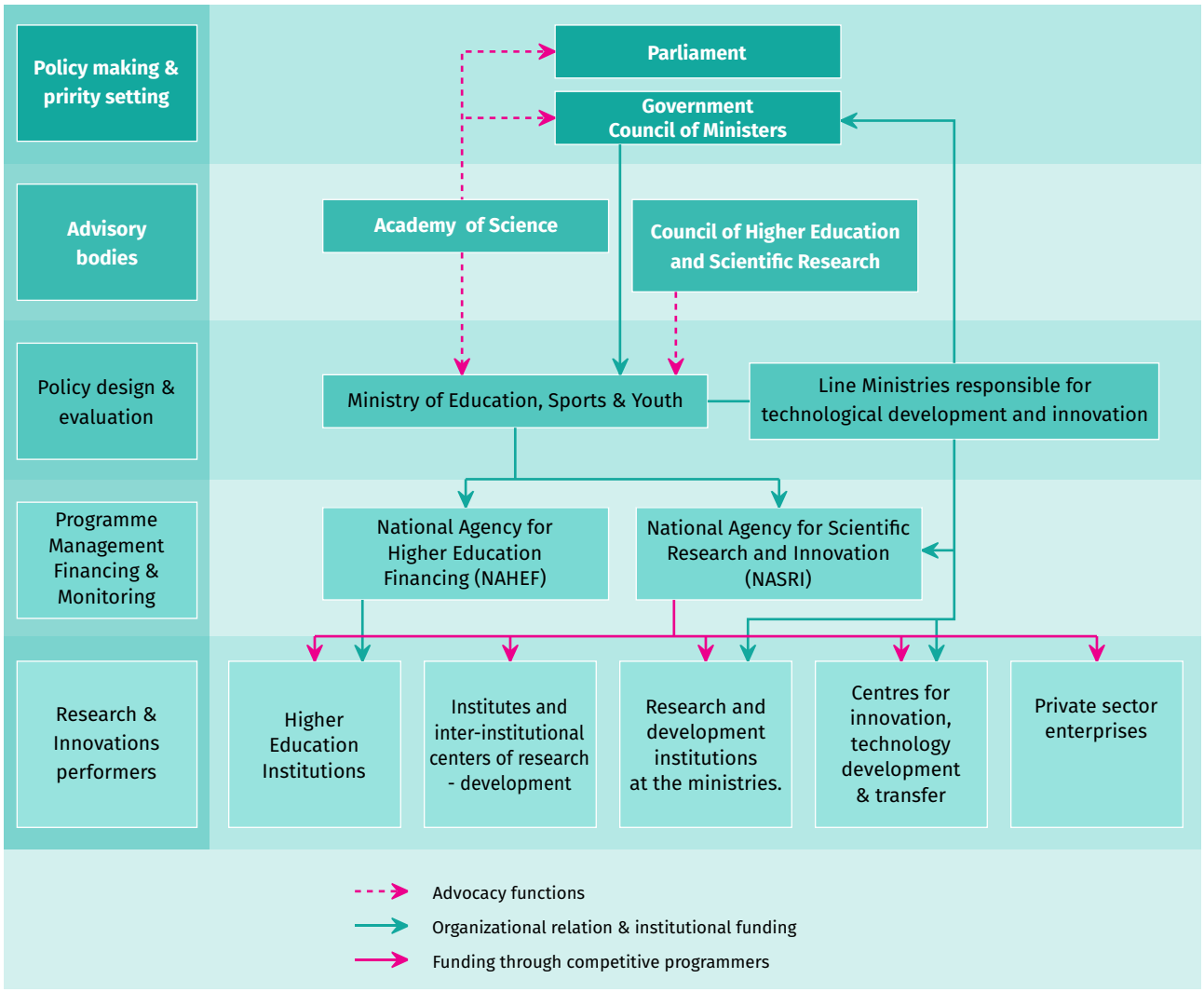
NASRI is tasked with providing information, supporting local research actors, and coordinating the application process to various calls for national and international research; coordinating the Network of National Contact Points of the EU Programme for Scientific Research and Innovation; cooperating with various actors for implementing the national strategy on science and innovation; and promoting the cooperation between academia and the business sector.

Most importantly, however, NASRI is responsible for distributing public funding for research, based on the projects submitted by higher education and scientific research institutions in the fields of natural sciences, engineering and technology, medical, agricultural, social, and human sciences. It is worth highlighting a key consideration: While promoting and supporting research and innovation is in NASRI's remit, the agency has no policy-making competency. The power to put forward legislation and/or policy lies with MoESY. As such, there is a gap between policy design and policy implementation.

Public funding for research has been very limited: on average, only 0.04% of GDP has been awarded as public for research each year,

Figure 5:

The Institutional ecosystem around higher education, research, technology, and innovation in Albania



Source: NASRI

well below the EU average of 2%[63]. DCM No. 75, dated 12.02.2018, "On Adoption of the Financing Model of Public Institutions of Higher Education and Scientific Research"[64] clarifies that only a maximum of 5% to 10% of the total annual grant from the state budget for public higher education and scientific research institutions is dedicated to scientific research and creative activities. These funds are distributed by NASRI and are open to all accredited public higher education institutions (universities and academies) for financing research work and doctoral studies.

To make the allocation decisions, NASRI takes into account the overall research performance of each institution, as indicated by the ranking produced through the assessment of HEIs according to the methodology outlined in DCM No. 165, dated 21.03.2018 "On the Methodology for the Evaluation Process of Scientific Research in the Basic Units of Higher Education Institutions". Additionally, NASRI takes into account other criteria, such as the number of joint research projects/contracts that each HEI implements in cooperation with the business sector, which has been given priority since 2021.

Albania's efforts in benefitting from international/EU research funding have been unsatisfactory. The country participates in the Horizon 2020 framework since its founding, but the success rate remains as low as 8.19%[65], having improved only marginally compared to previous years. Very few Albanian firms (including just one SME) have successfully participated in the programme.

4.3 Strategic Documents on the Higher Education and Scientific Research Sector

Since there is no overall strategy for tertiary education, the main strategic document in the field of scientific research is the National Strategy on Scientific Research, Technology, and Innovation 2017-2022 (NSSTI 2017-2022)[66]. However, higher education is addressed in the National Strategy on Education 2021-2026, currently awaiting approval.

NSSTI 2017-2022 outlines the objectives and priority areas for fostering a national innovation system by promoting applied research and technology transfer through partnerships of HEIs with industry actors and the international scientific community. This document was developed within the larger framework of the national objectives of the Government of Albania (GoA) and its vision of research and innovation as tools for overcoming the country's current and perspective socio-economic development challenges.

63 Council of The European Union "Commission Staff Working Document Economic Reform Programme Of Albania 2020-2022" (Brussels European Council:2020) Available at:https://data.consilium.europa.eu/doc/document/ST-7468-2020-INIT/en/pdf (last accessed- September 2021)

64 Decision No.75 "On The Approval of The Financing Model Of Public Institutions Of Higher Education And Scientific Research" (Council of Ministers:2018) Available at:https://unitir.edu.al/wp-content/uploads/2021/04/Vendimi-I-KM-Nr.-75-dat%C3%AB-12022018.pdf (last accessed- September 2021)

65 European Commission "Albania Horizon 2020 country profile" (EU Commision:2020) Available at: https://webgate.ec.europa.eu/dashboard/extensions/CountryProfile/CountryProfile.html?Country=Albania (As of September 2021) (last accessed- September 2021)

66 The Albanian version of the strategy can be accessed through this link: http://arsimi.gov.al/wp-content/uploads/2019/07/Vendim-i-KM_710_01.12.2017_Strategjia-e-Kerkimit-Shkencor.pdf or https://qbz.gov.al/eli/vendim/2017/12/01/710 (last accessed- September 2021)

The NSSTI 2017-2022 seeks to further consolidate the reform of higher education and scientific research, harmonizing it with the principles of the European Research Area (ERA) and aligning with the priorities set forth in Agenda 2030 for Sustainable Development[67], the European Agenda for the Innovation Union, and SEE Regional Development Strategy 2020.

Specifically, NSSTI 2017-2022 aims to support the cooperation between the scientific research and business sectors by: Creating legal fiscal mechanisms for funding scientific research from businesses; Increasing business participation in regional initiatives and programs; Stimulating businesses for creating startups in innovation and technology.

The strategy makes direct reference to the Triple Helix model: "the identified strategic purposes shall be achieved by maximizing the results of scientific research, by applying the Triple Helix principle, i.e., cooperation among government institutions, academia, business, and civil society" (p. 7). It is complemented by the Prime Minister's Order No. 1, dated 10.01.2017, "On the Approval of the Action Plan 2017 – 2021 for Supporting for the Development of Innovative Policies Based on the Triple Helix Model". Among others, this Action Plan outlines the establishment of a National Council for Innovation; the introduction of a financial support scheme for industrial PhDs and for hiring talented graduates in innovation projects in SMEs; the promotion of business-academia-government cooperation and dialogue for curricula updates and human capital development; the support for incubator and accelerator programs; the implementation of a 'Voucher for Innovation' scheme to stimulate SMEs; and the evaluation of fiscal incentives to foster innovation. However, the 2020 EC Country Report for Albania finds that the "Triple Helix Action plan continues to face delays [and] efforts to improve the business environment [...] have limited impact" (p. 94)[68].

A few words on the upcoming National Strategy of Education 2021-2026: Its aim is to foster a "comprehensive higher education system that meets international quality standards, academic integrity, and transparency, and is a promoter of the economic and social development of the country".[69] The strategy acknowledges the mismatch between theoretical, in-class learning, and skills needed in the labor market. Thus, it seeks to promote competency-based education, inter-disciplinary study programs, and formalized internship agreements between HEIs and policy-making institutions, agencies, and private sector companies. It also aims to make higher education more accessible, more transparent, more international and aligned with EHEA. The Strategy will need to be aligned with the National Strategy for Development and Integration 2021-2030 (currently in drafting), the University Pact of December 2018[70], the National Plan for European Integration 2020-

67 UN "The Sustainable Development Goals Report 2020" (United Nations:2020) Available at: https://www.un.org/sustainabledevelopment/development-agenda (last accessed- September 2021)

68 European Commission "Albania 2020 Report" (Brussels: EU Commission:2020) Available at https://ec.europa.eu/neighbourhood-enlargement/sites/default/files/albania_report_2020.pdf (last accessed- September 2021)

69 Ministry of Education and Sports of Albania "Draft-National Education Strategy 2021-2026" (Albania: Ministry of Education and Sports:2021) p.90 Available at: https://arsimi.gov.al/wp-content/uploads/2021/05/Draft-Strategjia-per-Arsimin-20212026.pdf?fbclid=IwAR1iov3xxk-kNyGArTSoqe-2Dy7OOV5w5XlrpuubSCFtYpQglGq8T-5k8EmI4 (last accessed- September 2021)

70 Ministry of Education and Sports of Albania "Draft-University Pact" (Albania: Ministry of Education and Sports:2019) Available at: https://arsimi.gov.al/wp-content/uploads/2019/01/DRAFT-PAKTI-PER-UNIVERSITETIN.pdf (last accessed- September 2021)

2022[71], the Digital Agenda and the National Plan for Sustainable Development of Digital Broadband Infrastructure 2020-2025[72], and eventual obligations stemming from regional cooperation under the umbrella of the Berlin Process and Open Balkan Initiative.

71 Centre of Official Publishing "Decision-For the approval of the National Plan for European Integration 2020–2022" (Albania: Council of Ministers:2020) Available at: https://qbz.gov.al/eli/vendim/2020/02/19/151 (last accessed- September 2021)

72 Ministry of Infrastructure and Energy "National Plan For Sustainable Development Of Digital Infrastructure, Broadband 2020-2025" (Albania:Ministry of Infrastructure and Energy: 2020) Available at: https://www.infrastruktura.gov.al/wp-content/uploads/2020/07/national-plan-bband-en.pdf (last accessed- September 2021)

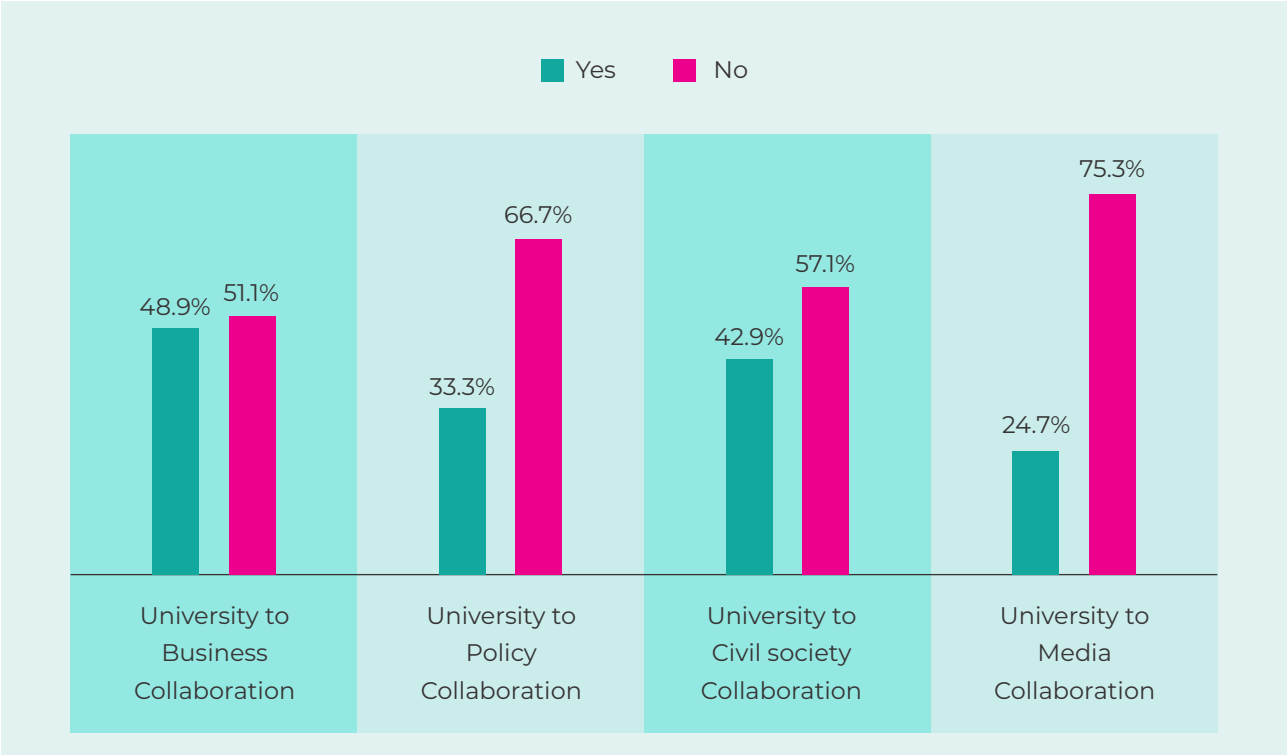
V. FINDINGS AND ANALYSIS

5.1 Researchers' Perspectives

Findings from the two surveys administered under the scope of this study shed light on the types and frequency of collaboration between partner universities and other domains of society. At an individual level, researchers who responded to the survey indicate that there is more frequent cooperation with the business sector (48.9%) than with the policy-making sphere (33.3%), civil society (42.9%) and/or media (24.7%). However, these responses do not differentiate between types of collaboration, i.e., individual vs. institutional collaboration, or long-term vs. short-term collaboration. These are explored further in the following subsections.

There is a general agreement among researchers that funding for research is limited and it constitutes a major challenge for the collaboration with other societal actors (50.2%). This is in line with the findings of previous studies

Figure 6:
University-to-society collaborations: Researchers' responses



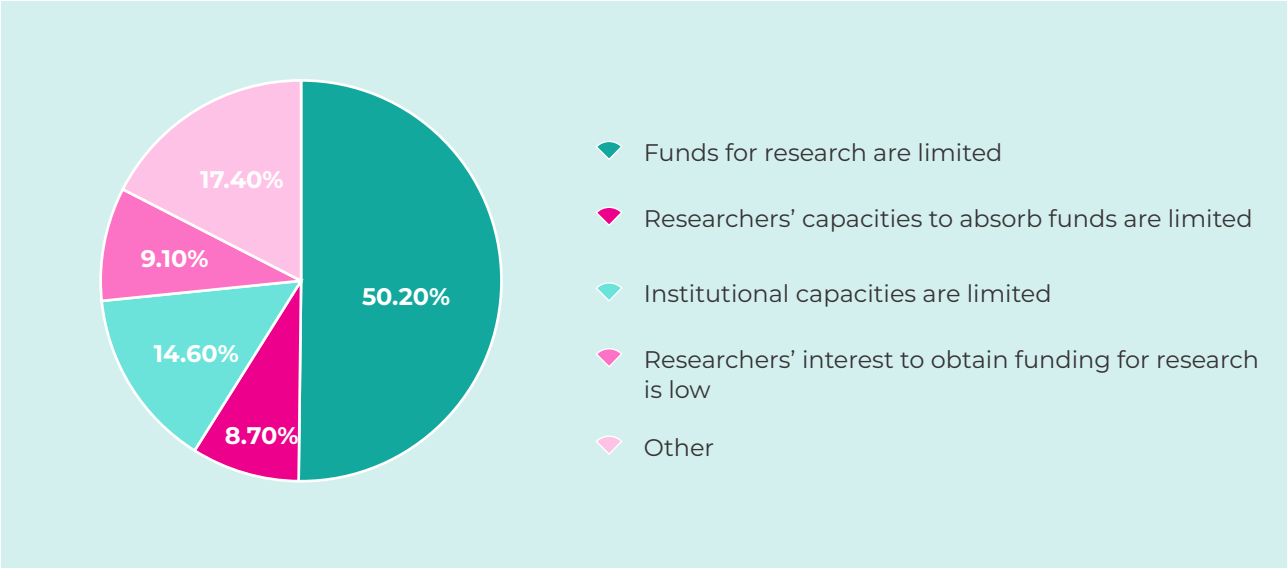
and existing literature, which argue that lack of research funding, low investment in R&D as well as limited research infrastructure and research capacities represent major hinderances to Albanian academia and scientific research.[73] The Erasmus+ Programme and the previous Tempus Programme of the EU have contributed significantly to research infrastructure improvements in higher education in Albania.[74]

The second, most important challenge identified by survey respondents is the limited institutional capacities of universities for funding research (14.6%).

Some 64.8% of the respondents reported that they fund their research work through personal funds. Only 6.8% fund their research through dedicated funding from their university. According to the survey results, national (public) funding for research and research funding from the business sector appear to be virtually non-existent. Some research funding is obtained from international organizations operating in Albania. However, that is mainly dedicated to applied and policy-oriented research. Also, 21% of surveyed researchers reported that they conduct research through funding obtained as part of consultancies or other engagements with think tanks and CSOs.

Although Albania participates in the EU research and innovation programmes since 2008, extent to which the European Commission research programmes are sources of research funding for individual researchers in Albania is still limited. In fact, despite efforts to increase the number of Horizon 2020-funded activities/projects that Albanian universities

Figure 7:
Main challenges for obtaining research funding



73 SPHERE "Harnessing the potential: Research Capacity in the Western Balkans-Report" (Sphere:2018) Available at: https://eua.eu/downloads/content/western_balkan_report_final_-_2018_07_02.pdf (last accessed- September 2021)

74 Factsheet Albania, available at **https://ec.europa.eu/programmes/erasmus-plus/resources/documents/country-factsheet-albania_en** (last accessed- September 2021)

Figure 8:

Research funding sources

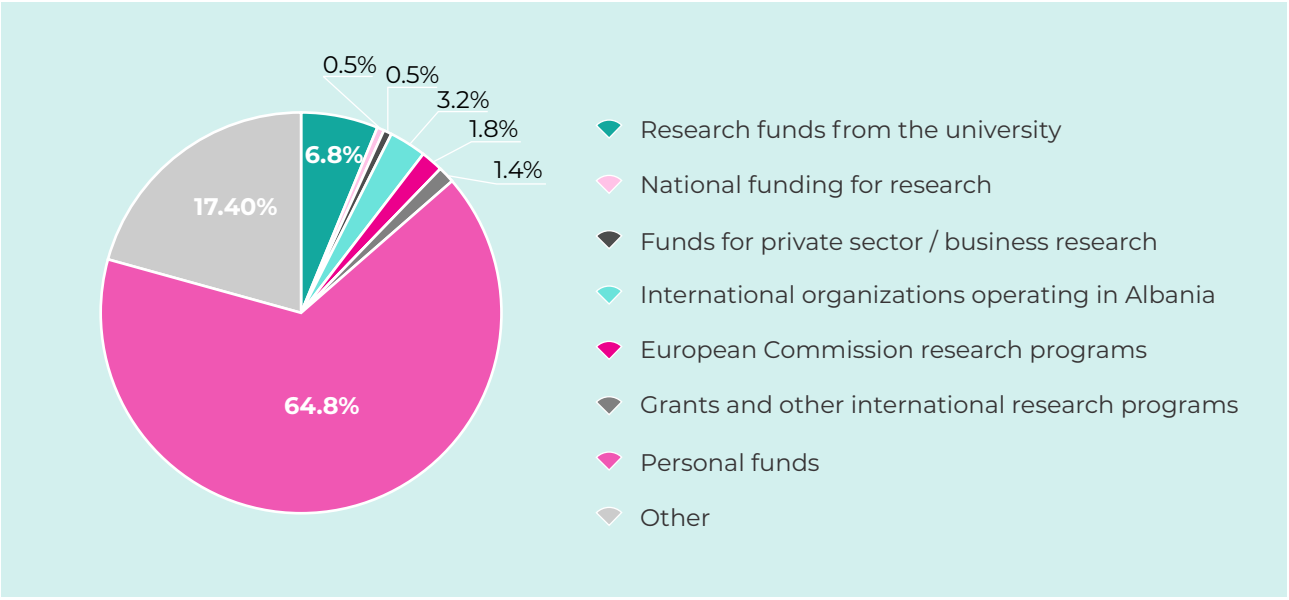
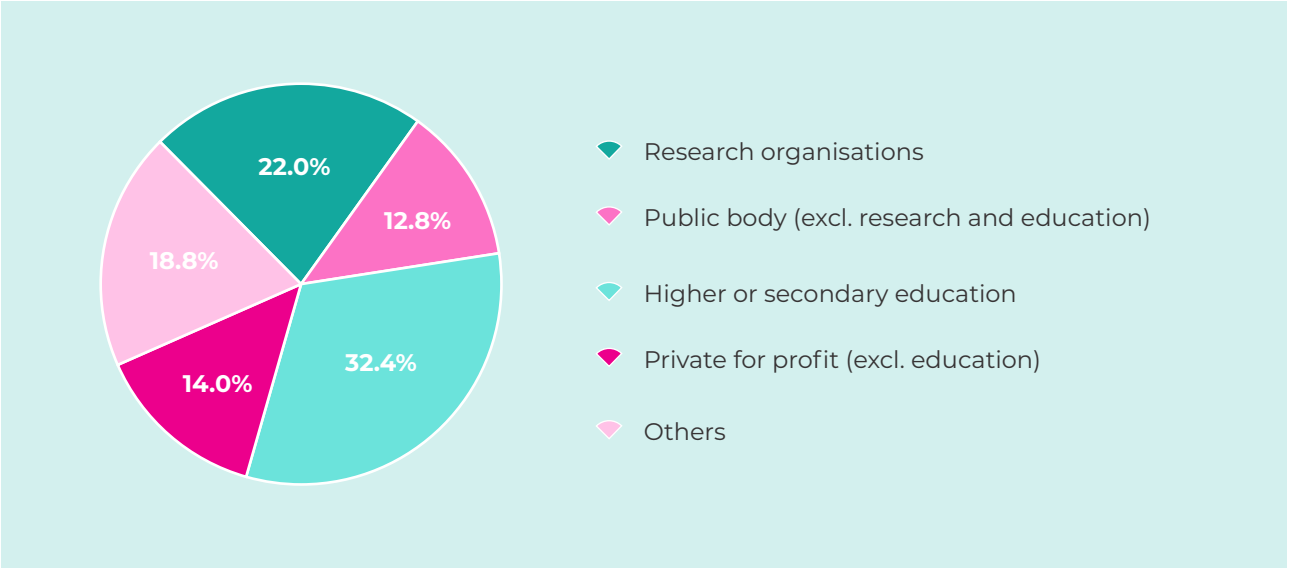


Figure 9:

Participation in Horizon 2020 by sector



**Data Source: Horizon 2020 Report Albania*

participate in, the success rate remains low at 8.19% compared to 13.35%[75] of the associated countries' average.

The Horizon 2020 report on Albania[76] shows that the primary beneficiaries of research funding from the Horizon 2020 programmes

75 European Commission "Albania Horizon 2020 Country Profile" (EU Commision:2020) Available at: https://webgate.ec.europa.eu/dashboard/extensions/CountryProfile/CountryProfile.html?Country=Albania (As of September 2021) (last accessed- September 2021)

76 European Commission "Albania- Horizon 2020 Policy Background" (EU Commision:2020) Available at: https://ec.europa.eu/info/research-and-innovation/strategy/strategy-2020-2024/europe-world/international-cooperation/albania_en (last accessed- September 2021)

are higher education institutions, followed by research centers and private companies. A major issue in accessing research funding is the lack of data on public expenditure for R&D and R&I. Other contributing factors are the lack of a clear methodology for establishing funding for research and science, as well as the absence of a research infrastructure map.[77]

Of the surveyed researchers, 96% responded that they obtain funding or participate in EU programmes. Only 9% of these respondents reported obtaining funding from Horizon 2020, and 5% reported participating in COST actions, where 42% stated that they participated in Erasmus+ Programme and 14% participated in IPA Programmes. It is crucial to note that participation in these programmes does not necessarily mean direct funding for research. Rather, according to the surveyed researchers, mostly it comes as funding for capacity building and networking opportunities.

In addition to the above, participants to in-depth interviews and focus group discussions mentioned the difficulties they faced in establishing cooperation offices within their respective institutions, as well as the challenges of setting independent agendas and managing the scarce resources for collaboration with other actors in society.

They discussed the shortcomings of the higher education strategy (2015-2020) and legislation in force.[78] They stressed the challenges posed by the strict requirements for the approval of curricula and curricular changes. In their view, this has made academia very slow in responding to market needs.

Finally, they mentioned that blocking of enrollments in the third cycle of studies, doctorates, and executive master programs since 2016 has damaged the connection of academia with the labor market and has impoverished research activity within the departments.

Table 5:
Researchers' participation in EU Programmes

EU Programme	Researcher's participation
Erasmus Mundus Programme	7%
Erasmus+	42%
H2020	9%
COST Actions	5%
Creative Europe	3%
Europe for Citizens	4%
COSME	0.5%
InterregMed	9%
BalkanMED	2%
IPA	14%

77 European Commission "European Neighbourhood Policy and Enlargement Negotiations-Albania Report 2020" (Brussels: EU Commission:2020) p.99 Available at:https://ec.europa.eu/neighbourhood-enlargement/sites/near/files/albania_report_2020.pdf (last accessed-September 2021)

78 For more details on the policy framework and legislation in place, please refer to Section IV of this study

5.2 University-to-Business Collaboration

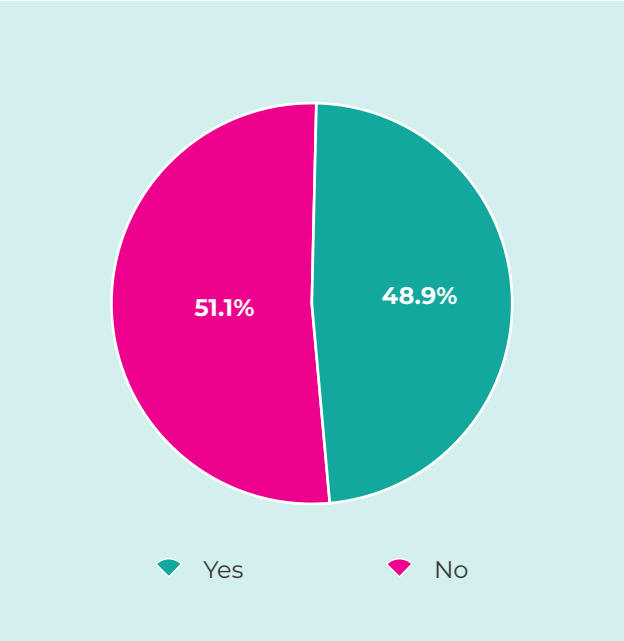
Some 48.9% of surveyed researchers confirm that they currently collaborate with the business sector. The 51.1% who do not collaborate with the business sector indicate the lack of opportunity, the low interest of business to fund research, and incompatible research aims as main contributing factors.

Findings from interviews and focus group discussions point out to two distinct perspectives: (i) a mismatch between the slow-paced academic research process and the quick-paced nature of decision-making in the private sector, and (ii) misaligned perceptions of the needs and wants of the two parties.

Some businesses claim that the quality of research produced by Albanian researchers does not mean their requirements, and, as such, they procure research elsewhere. Others say that the nature of most Albanian businesses is not research-intensive and requires, at best, only innovative marketing strategies rather than product development-oriented innovation. Some of the researchers, on the other hand, claim that they are more focused on traditional rather than applied research, making the collaboration with business unnecessary.

Both groups seem to agree that curricula in Albanian universities is outdated. It does not respond to market needs for expertise, with most recent graduates needing on-the-job training once they are hired. Additionally, both cite a lack of mutual trust and lack of awareness on possibilities for collaboration. Business representatives would like more information on the research projects being conducted in universities, as well as more frequent follow-ups and updates on the research results.

Figure 9:
University-to-business collaboration



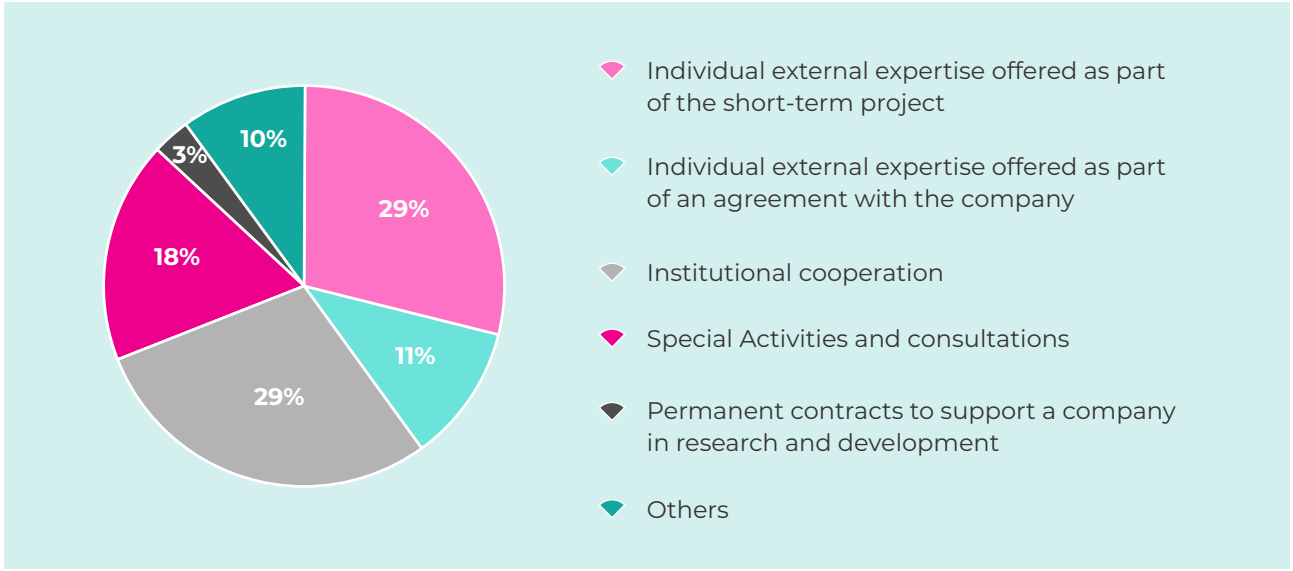
For those researchers who do cooperate with the business sector, the main type of cooperation is through individual external expertise offered as part of a short-term project (29%) or as part of institutional cooperation (29%). Only 3% of the researchers who cooperate with business are contracted on a permanent basis to support the company in research and development.

According to findings from interviews and focus group discussions, most of these collaborations are established on individual basis, personal and professional networks, and concrete assignments with measurable outputs.

Funding for collaboration is relatively scarce. In 34% of cases, these collaborations are financed by company funds, 12% are financed by donors and only 8% by university funds. Some 26% of respondents identify other sources of funding, including personal funds, short-term consultancy services in cooperation with CSOs and think tanks, and mobility schemes.

Figure 10:

Type of collaboration with the business sector

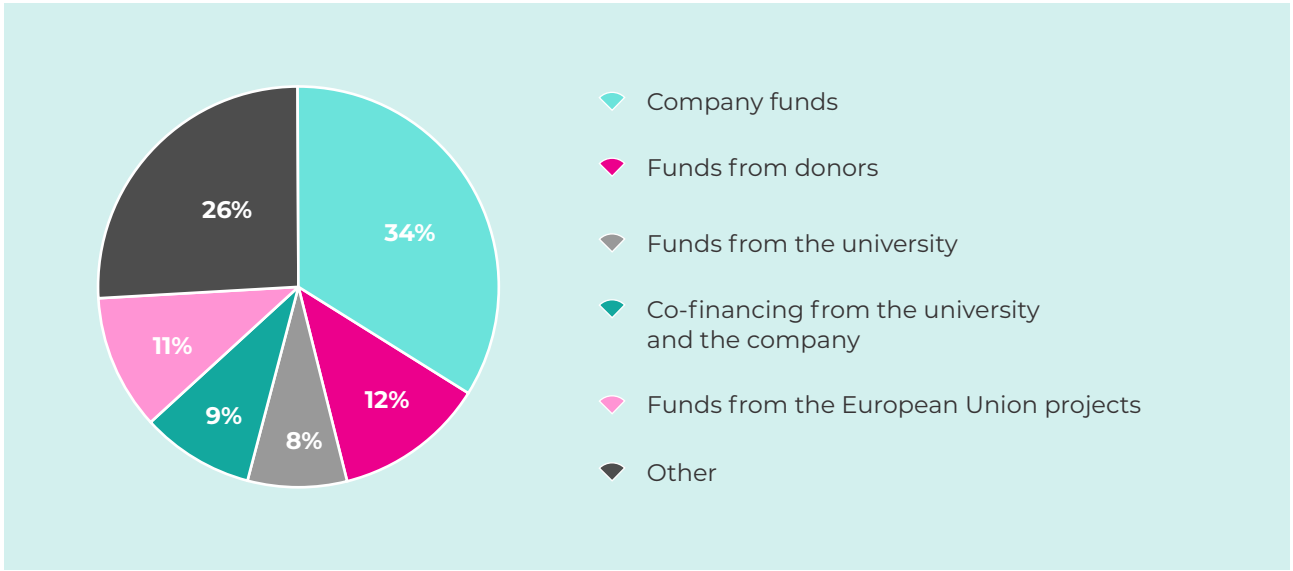


Some business representatives that participated in focus group discussions felt that, since there are designated public institutions responsible for funding scientific research, it was not necessary for their companies to finance research project, unless they have a direct interest in the research results.

Survey results show that the main activities stemming out of researchers' collaboration with the business sector are consulting for business development, market research and surveys, and employees' training and capacity building including human resources management. However, the most frequent type

Figure 11:

Form of financing for cooperation with the business sector



of activity includes coordination of students' internships, job placements, and organization of job fairs. This is confirmed in interviews and focus groups as well. In some cases, ad hoc or project-based activities that seek to foster networking and interaction between university and business have been organized with a focus on adapting curricula development to labor market, attracting alumni to contribute to university, skills development, and potential knowledge transfer.

Interviewees and focus group participants agree that limited funding, coupled with ad-hoc and informal cooperation set-ups, make long-term, structured university-to-business collaborations untenable. However, in some cases, joint activities have led to long-term, institutional cooperation focused on students' internship, job fairs, curricula development, staff capacity building, and joint project applications.

Surveyed researchers point out that some of the major benefits from this cooperation with the business sector include fostering networking and increasing collaboration, acquisition of new knowledge from the business sector and development of new skills aligned with business needs, funding and opportunities for research applied to business challenges, increase of revenues and career diversification opportunities, and familiarity with new and advanced technologies.

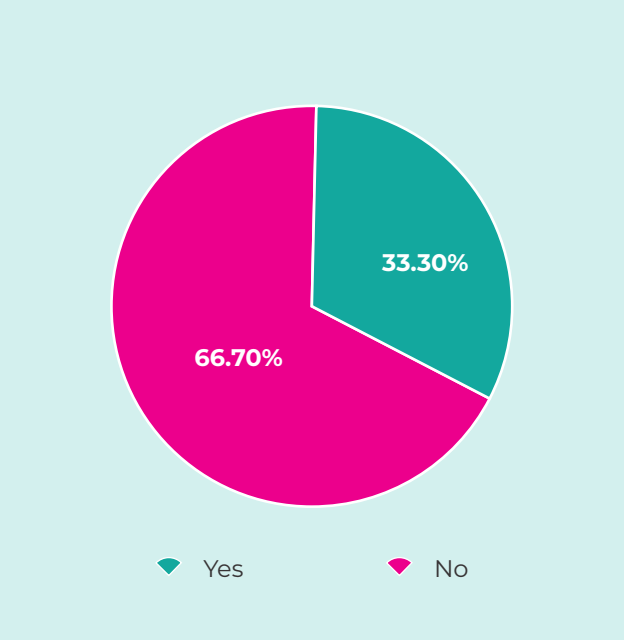
In principle, all survey, interview and focus group participants agree on the importance of the university-to-business collaboration. Surveyed researchers suggest that for university-to-business collaboration to be successful, it is crucial to maintain a sustainable and professional cooperation based on mutual trust, transparency, and a spirit of cooperation; concrete objectives and plan of activities ideally set out in an institutional agreement; regular communication, inclusion and maintaining high ethical standards; diverse sources of funding, including public funding, for enhancing university-to-business collaboration; universities must ensure participation of researchers with quality and up to date expertise in line with business needs; initial assessment of needs and expectations from both supply and demand side, and review of state of cooperation with identification of lessons learnt, success stories, challenges, and ways to move forward.

5.3 University-to-Policy Collaboration

Approximately 2/3 of surveyed researchers state that they do not collaborate with the policy sector.

Researchers find that some of the reasons for the lack of cooperation with policy sector (local and central government) is lack of

Figure 12:
University-to-policy collaboration



opportunity, lack of access to policymaking institutions, lack of joint projects to enable cooperation, lack of interest on both sides to cooperate, research focus not related to policy, and personal stance not to be involved in 'politics'. Moreover, the lack of a national research agenda further hinders collaboration between researchers and the policy sector. Finally, the COVID-19 pandemic has hampered even the few previous attempts to cooperate.

For those who do cooperate with the policy sector, the engagement comes as part of institutional cooperation (43%), while the majority of cooperation happens outside of institutional settings to an amount of 57%. The leading type

Figure 13:
Type of cooperation with policy

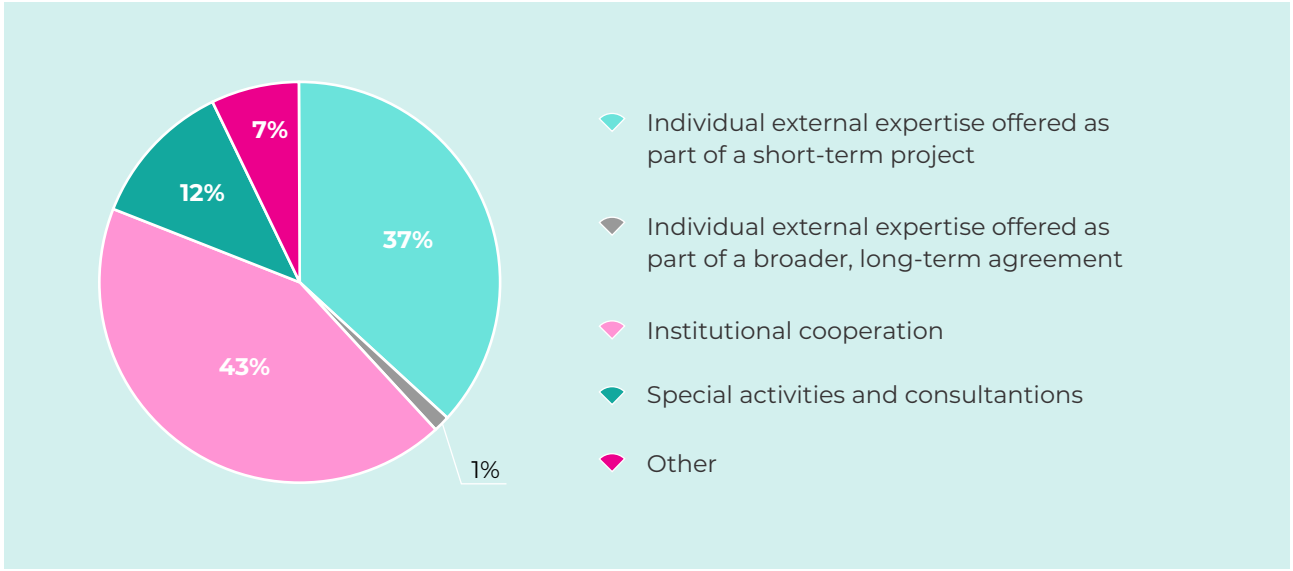
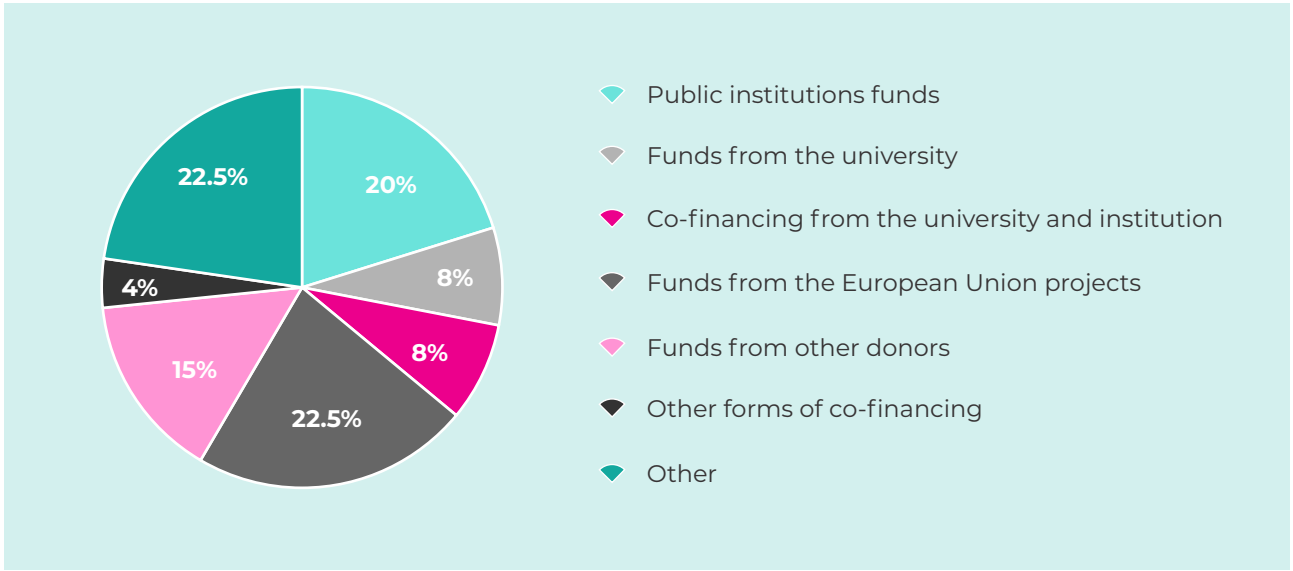


Figure 14:
Manner of funding university-to-policy collaboration



of cooperation outside institutional settings is individual external expertise offered as part of a short-term project (37%).

Some 22.5% of the reported instances of collaboration are funded through European Union projects, 20% from public funding, and only 8% from university funds.

The main activities conducted through researchers' collaboration with the policy sector include consulting for drafting, reviewing, and evaluating national and/or local strategies, public policy documents and reports, capacity building and training, project writing, coordination of students' internships, job placements, and organization of job fairs, organization of conferences, seminars, and roundtables, legal consultations, and strategic planning on digitalization.

The main results of their collaboration with policy sector identified by the surveyed researchers include drafting of documents (strategies, policy documents, reports), increased capacities of public administration and researchers alike, access to information and data, mobility and exchange of experiences, European *acquis* approximation in research and education, and improvement of quality of research and teaching.

Acquisition of in-depth knowledge of policy sector, expansion of networks and opening to new experiences, financial gain and increase in revenues, research contribution to community, better understanding of decision-making process in public institutions, and professional growth and diversification of expertise are listed as some of the major benefits from the cooperation with the policy sector.

Surveyed researchers suggest that for university-to-policy collaboration to be successful, it is crucial to develop such collaboration on common goals informed by concrete assessment of the needs and expectations, to build and maintain an institutional cooperation that provided inclusive and transparent opportunities for researchers and students; instill mutual trust and spirit of cooperation; ensure transparency of funds and high level of professionalism and ethical standards; establish adequate channels of communication, good will and commitment, funding and wider involvement of stakeholders.

When comparing survey responses with findings from the two in-depth interviews with policymakers, we note a similar sentiment. Respondents perceive the collaboration between Albanian universities and society in general, and universities and policy in particular, as underdeveloped. They attribute this to a lack of awareness and lack of trust between researchers on the one hand and other domains of society on the other, including policymakers. Respondents believe that even the very few existing exceptions[79] are not sufficiently promoted as successful models and are, therefore, unknown to the wider audience. They emphasize the role of NASRI as the key central-level institution that can promote collaboration between academia and other domains in society.

Finally, interview respondents find that there is insufficient information on the scientific research sector in Albania (including the resources and capacities available). The little information that is available does not capture what the research community is doing, be that individually, or in domestic and/or international teams. This contributes to the perception that policymaking and scientific research

79 The first respondent mentioned the case of the Agricultural University of Tirana (AUT), which works actively with the business sector.

are "*two worlds apart*". Sharing information as well as promoting successful examples of collaboration will serve to break the trust barrier and remedy misperceptions of these two groups vis-à-vis one another.

5.4 University-to-Civil Society Collaboration

The majority of surveyed researchers, 57.1%, report that they do not collaborate with civil society actors, while 42.9% of surveyed researchers confirm collaboration with civil society actors. The latter point out that some of the reasons for the lack of cooperation with the civil society sector is lack of opportunity and research interest, workspace restrictions, civil society does not engage in research activity, lack of common projects, and unsuccessful previous experience.

For those who collaborate with the civil society sector, the engagement mostly comes as an individual external expertise offered as part of a short-term project (44%), and as special activities and consultations to civil society organizations (27%). Institutional collaboration remains at a low level of 15%.

Some 38.5% of the surveyed researchers report that the collaboration with civil society

Figure 15:
University-to-civil society collaboration

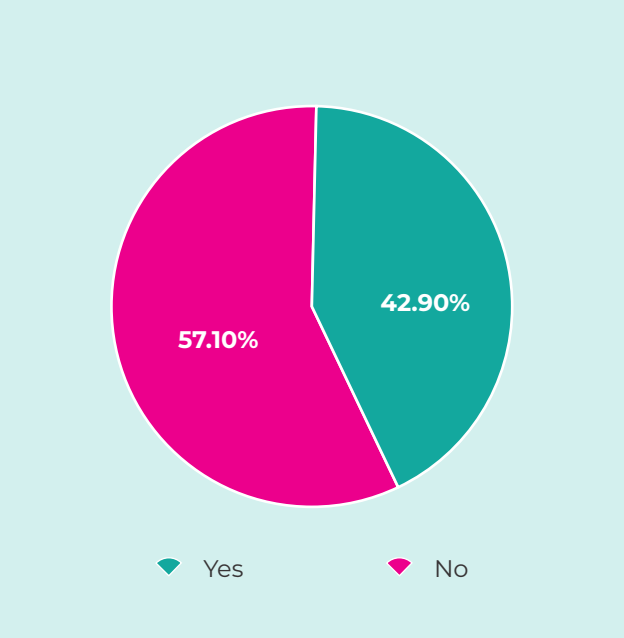


Figure 16:
Types of cooperation with civil society sector

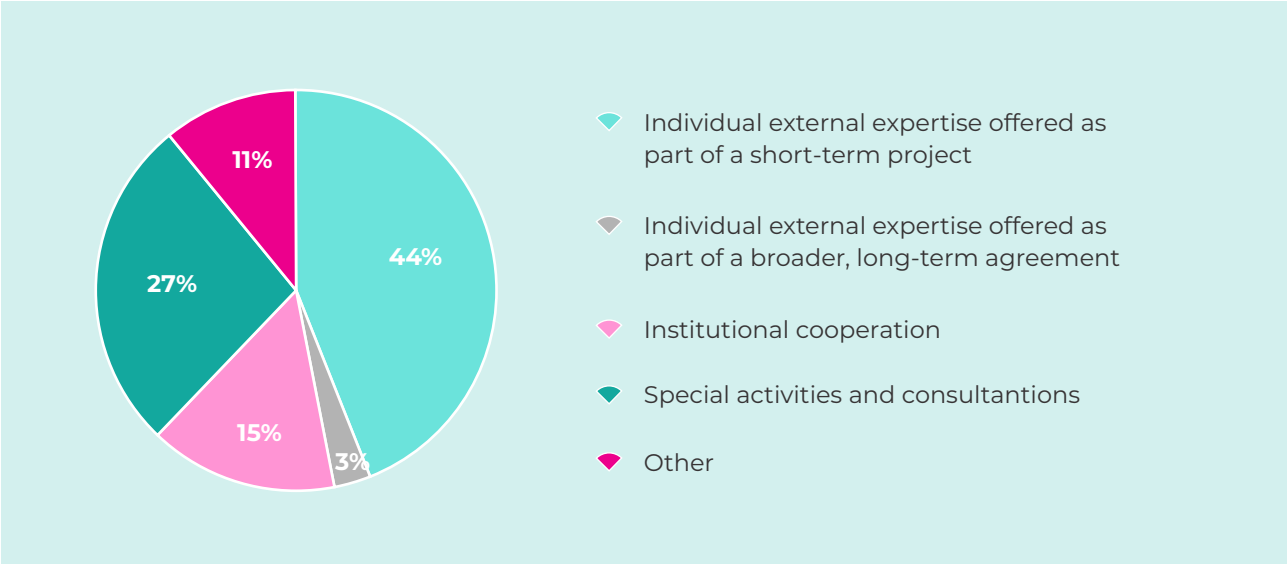
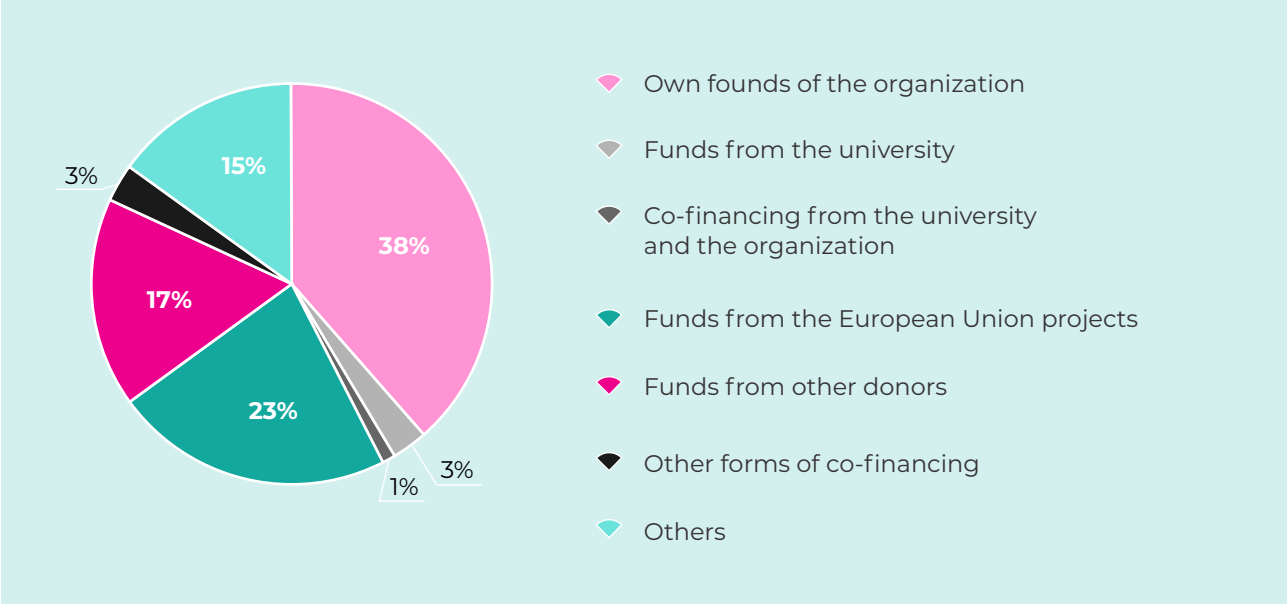


Figure 17:

Manner of funding university-to-civil society collaboration



actors is funded by the CSOs' own funds, while 39.5% of funds come from donors, with funds from EU projects reaching 22.5% of the overall funds. Funds from university remain at a low of 3%, while co-financing university and the organization at only 1%.

The main activities stemming out of the collaboration with civil society are engagement in action and policy-oriented research, including involvement of students in the research, project writing and joint applications, capacity development programmes, project and research management, organization of conferences, seminars, workshops, open lectures, scientific publications, hackathons and other students-centered participatory activities, and institutional support.

The surveyed researchers point out that the main results of this cooperation with civil society include publication and dissemination of research reports, analytical documents, policy papers, provision of trainings and capacity building, development of community-based projects, such as youth advisory councils at the local level, networking and gaining new experiences, and skills and knowledge development from civil society sector.

Among the main benefits of the researchers' collaboration with civil society are more engagement in community and local development, increased possibilities to fund and publish research that is applied and oriented towards policies, professional growth by expanding field of expertise, increasing revenues and enhancement of networking, opportunity to communicate and establish bridges of cooperation with local and central public administration, access to data, and sharing of knowledge as well as exchange of best practices.

Surveyed researchers identify the following as key factors for successful university-to-civil society collaborations: clear definitions and agreements on the roles of partners in the cooperation process; open communication

within teams to share information needed to perform tasks; consensus on goals and methods for completing projects or tasks; recognizing and respecting the contribution of all collaborators; funding of cooperation; institutionalization of forms of cooperation; mutual interest and trust; transparency and sharing of information; high ethical standards and professionalism; increasing the credibility among stakeholders for cooperation; regular communication and commitment.

Comparing survey responses with findings from the three in-depth interviews with civil society representatives, we find very differing experiences. Two of the interviewees see academia and CSOs as two separate and distant groups, which have little, if any, incentives to collaborate at an institutional level. Both attribute this to the different work dynamics in CSOs and academia. CSOs need to be agile and flexible to respond to project needs, whereas universities are rigid and bureaucratic. Thus, there is an inherent mismatch, to which one of the respondents believes that universities respond by being territorial and unwilling to collaborate.

Yet, both these respondents confirm that their organizations cooperate frequently with individual university researchers. Collaboration in replicating survey findings was selected by 15% of respondents. These instances of collaboration are motivated by researchers' expertise. Researchers are hired as consultants (paid for through CSO funding), based on connections made through individual networks. One of the interviewees argues that individual researchers in academia and civil society are fully integrated with one-another. It is academic institutions and CSOs that are not. The latter believe that cooperation at any institutional level would only bring more bureaucracy and no added value, especially when considering that universities do not reward engagement with research work.

The third interviewee, on the other hand, paints a very different picture. Her organization collaborates regularly with universities both through institutional channels as well as by hiring individual researchers for ad-hoc assignments. This CSO considered collaboration with universities as very important not only for access to subject matter expertise, but also for showcasing their position as a well-networked organization to prospective donors.

Typically, these collaborations have been initiated and paid for by the CSO. They entail the organization of joint events, such as thematic forums, discussions, book promotions, as well as hosting of interns, and contribution to research projects, although the latter happens mostly at an individual level. This has been a way for the organization to ensure the success of their projects by obtaining access to additional expertise and larger fora for their events.

The most consolidated of these relationships has been institutionalized with the signing of a Memorandum of Understanding (MoU) between the organization and a public university. The collaboration has had a more ad-hoc nature when the relationship with a given university is relatively new and in the absence of formal agreements. In these cases, the interviewee's organization is careful to channel communication through the university's rectorate.

In a similar vein to the surveyed researchers, this interviewee believes that the main factors driving their organization's collaboration with academia are mutual trust and consensus on objectives. The respondent finds that these collaborations have been characterized by

high levels of professionalism, commitment, and integrity. The challenges they experienced had to do with the institutionalization of the relationship.

Civil society representatives that were interviewed for this study had diverging levels of confidence in the future of the *institutional* collaboration between universities and civil society. Two of the interviewees commented that they are not able to see "a way to make this collaboration work" and/or "any short- to mid-term benefit from an institutional cooperation with universities", due to the different internal dynamics within universities and civil society. They believed that this collaboration is largely unnecessary given that individual researchers in academia and civil society are fully integrated with one-another and cooperation at any institutional level would only bring more bureaucracy and no added value. Respondents noted that there are differences between social science research and natural science/STEM research, which give rise to different challenges and opportunities for cooperation in certain disciplines vis-à-vis others[80]. Lastly, the EU integration process presents an advantageous moment, because it will require a shift in the attitudes about and demand for research, since research results will be necessary for negotiations. Therefore, this is a critical time to promote science-to-society collaboration models.

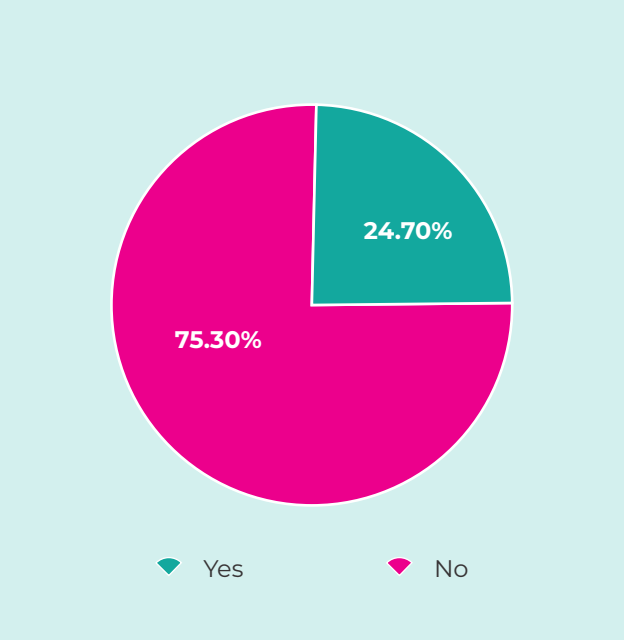
5.5 University-to-Media Collaboration

Only 24.7% of the surveyed researchers report collaborating with the media actors. The other 75.3%, who do not collaborate with the media, list the lack of demand for research results by media outlets and journalists, lack of opportunity, limited skills and expertise of researchers to communicate research findings, lack of contacts and facilitation of interactions, focus on academic career path and obtaining academic titles/degrees rather than communication of research, lack of personal interest for media presence, and lack of trust in journalists capacities to present adequately scientific findings and results as reasons for the absence for more extensive collaboration with media.

Media representatives that participated in focus group discussions feel that universities see the collaboration with media as a tool for being present in the news, but do not acknowledge that they are benefitting from a service which needs to be paid.

The surveyed researchers who do collaborate with the media point out that cooperation has been primarily initiated on the basis of donor-

Figure 18:
University-to-media collaboration



80 The underlying assumption here is that some business or policy actors might not immediately appreciate the usefulness of social science research for decision-making, as opposed to that of laboratory testing or engineering simulations, to mention as examples.

funded projects, from personal experience in the media and then transition to academia, personal connections and networks, as part of university marketing and public relations efforts, and involvement in civil society organizations working with media such as Albanian Media Institute.

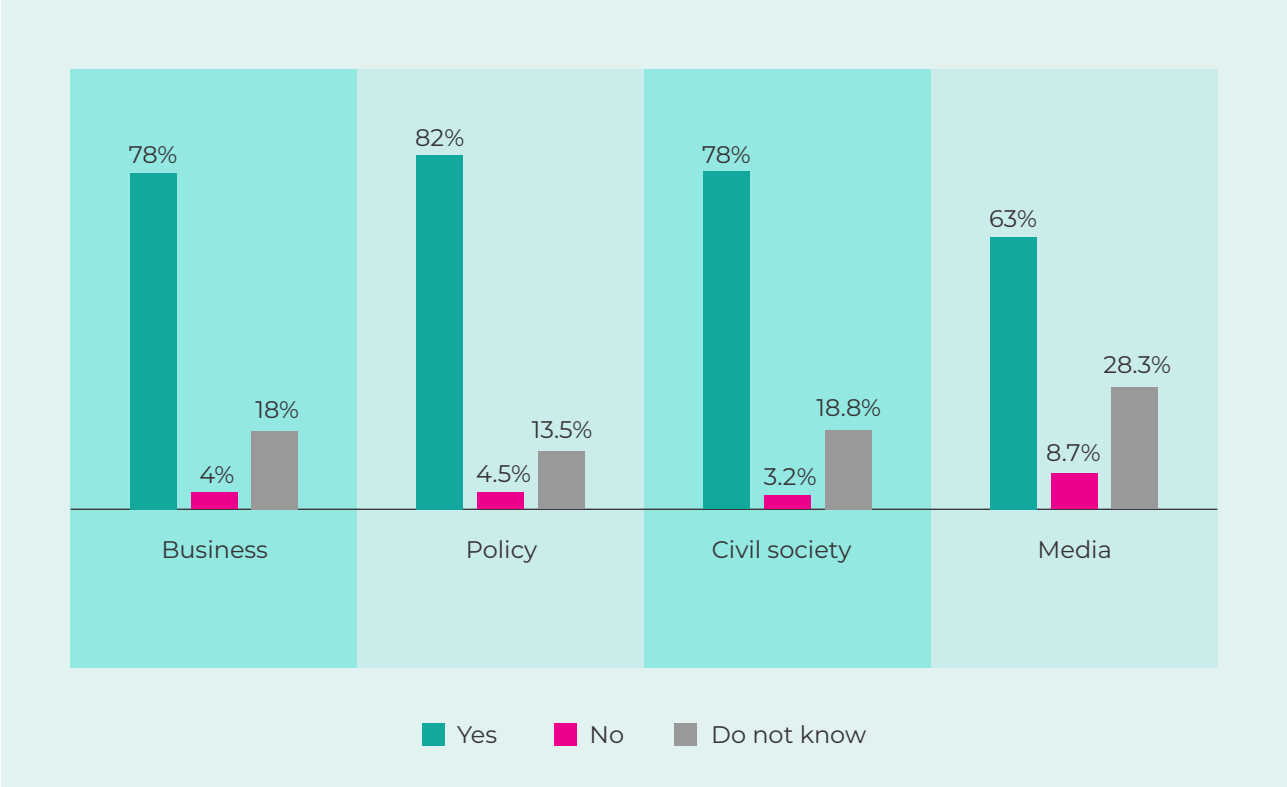
Survey results indicate that the main benefits of cooperation with the media include reaching a wider audience and raising awareness of stakeholders and public at large about particular research areas, informing the public about research findings and results, professional growth and networking, improved quality of teaching, and increase in opportunities of cooperation with other stakeholders, particularly from CSOs and policy.

Surveyed researchers point out that key factors for successful collaboration with media include having shared goals and interests, flexibility and adaptability to different modes of communicating research, regular communication, commitment, and systemic media presence, professionalism and ethical standards, access to media, and strategic vision and concrete university policies to promote communication of research.

5.6 Drivers and Barriers

Across the board, all actors reiterated that collaboration between universities and other actors in society is important and needs to be further advanced. The following paragraphs summarize some of their needs and ideas on what would be necessary to make this collaboration work.

Figure 19:
Future university-to-society collaboration: researchers' responses



Individual researchers' survey responses confirm a great interest and willingness to cooperate with the business, policy, civil society, and media in the future.

The surveyed researchers outline some key reasons for their interested and willingness to collaborate with various stakeholders from the society: business, policy, civil society, and media that can be generally grouped into these categories:

a. Professional growth and revenue increase: networking, knowledge acquisition, skills development, financial gains, exchange of experiences, mobility options, public exposure, and diversification of expertise;
b. Curricula development and improvement of teaching;
c. Students' internships and job fairs;
d. Contribution to regional development, community, and society at large (engaged university);
e. Research quality and communication to diverse audiences: access to data, technology, decision making processes and real-life problems; research funds and joint projects; collaborative research; publication of applied and policy-oriented research; and communication to external audiences and wider publics.

One of the surveyed researchers articulated that: "*Cooperation remains the only way for academia to serve society and create added value for society and the economy*". Another one echoed: "*All four actors [science, policy, industry, civil society] are important to produce valuable and useful knowledge to the service of the community*".

However, some researchers remain uninterested in collaborating with other actors in society. Of them, some argue that basic research does not require involvement of other actors and that science and research operate differently from policy, business, and civil society. Others still report that their teaching workload and restrictions imposed by the university do not allow much space for collaboration. Some researchers express distrust in the ways in which civil society and media work, particularly in terms of political ties, and thus prefer to maintain "*a safe distance from politics and areas related to it*".

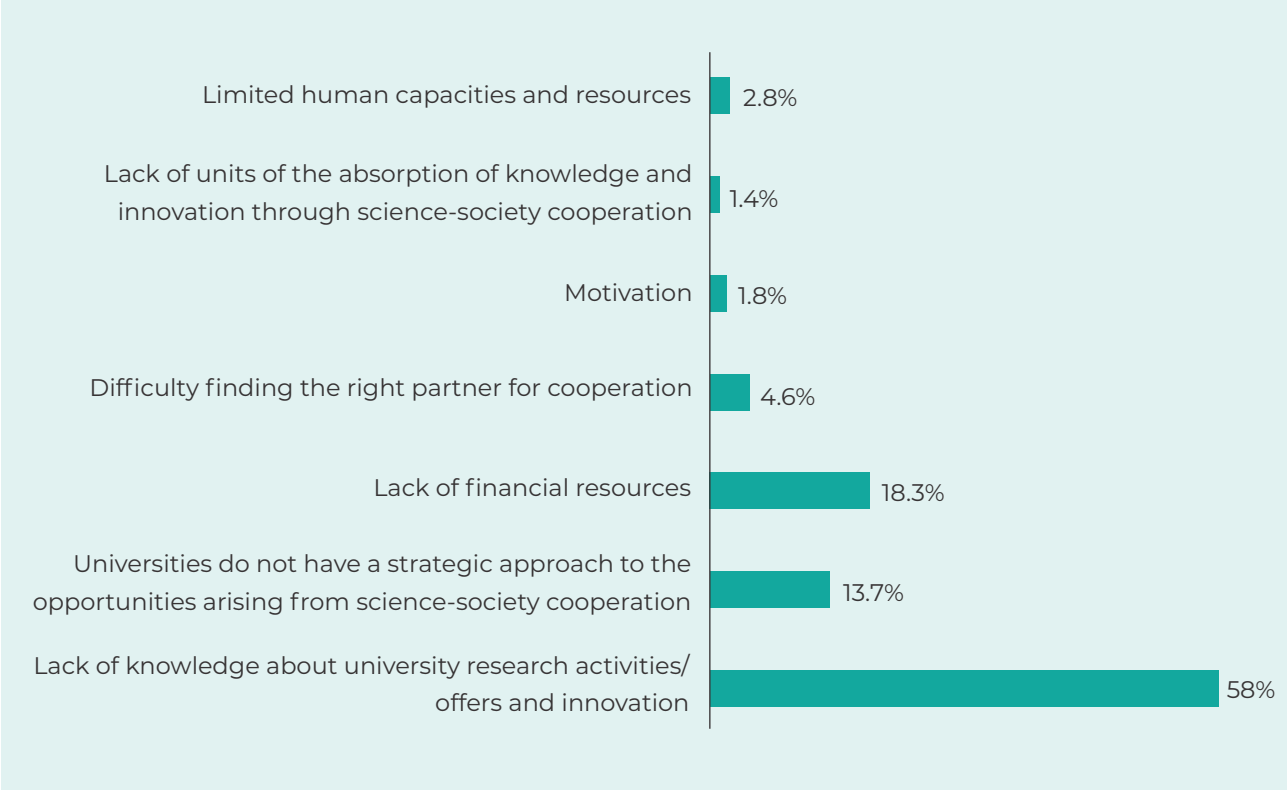
Interestingly, Figure 19 shows that, across the board, there is a considerable number of respondents that are unsure about the collaboration with the policy, business, civil society, and media (percentage of those choosing "I do not know"). The highest percentage of uncertainty (28.3%) relates to the collaboration with media, indicating a lack of understanding about what such collaboration entails, and possibly how to initiate it.

Barriers to Collaboration

Most of the surveyed researchers (58%) think that the lack of information and knowledge about university research activities and its academic offer and innovation is a key barrier in achieving successful university-to-society collaboration. Some 18.3% think that financial resources are a barrier to the university-to-society collaboration. Also, 13.7% of researchers think that another barrier is the lack of university strategic approach to the opportunities arising from university-to-society collaborations.

Figure 20:

Barriers to the university-to-society collaboration



Researchers' Needs for Collaboration with Society

Most of the surveyed researchers need financial resources to enable and support their cooperation with other societal actors, followed by capacity building and facilitation of cooperation. One fifth (20.5%) of the surveyed researchers state that they need networking and access points to cooperate with media. In addition, the respondents state that reduction of teaching workload can facilitate the collaboration.

Enabling Factors for University-to-Society Collaboration

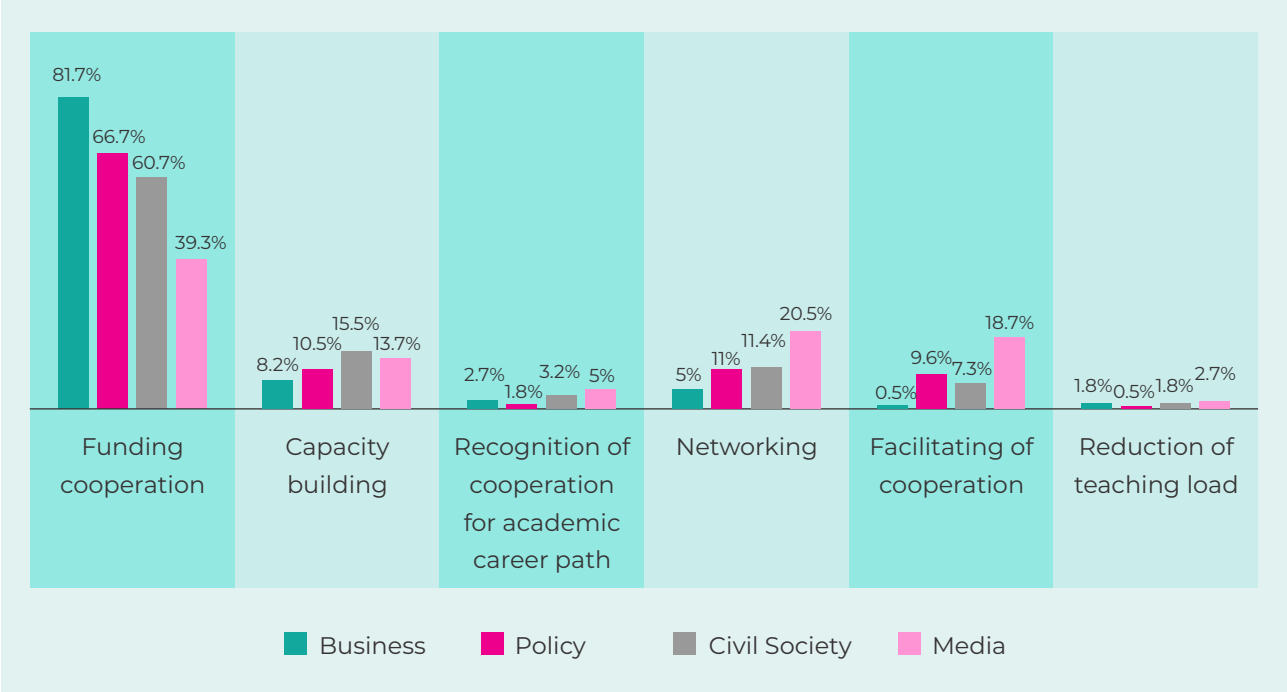
The surveyed researchers identify the clear and strategic orientation of their university towards knowledge transfer and innovation as well as the possibility of accessing financial resources as enabling factors for university-to-society collaboration. Other enabling factors include partner flexibility and interest in accessing knowledge and research, mutual trust and engagement, setting common goals and institutionalizing agreements, and collaboration as an effective tool to address social challenges and issues.

Policy Tools to Foster Collaboration

Researchers participating in focus group discussions placed great emphasis on the role of the Ministry of Education, Sport, and Youth in proposing policies and legislation for the higher education and scientific research sector. Participants argued that the legal framework regulating the higher education needs to be amended, with the aim of reducing bureaucracy and increasing flexibility with regards to curricula modernization, estab-

Figure 21:

Researchers' needs



lishment of knowledge and innovation transfer and intermediary offices, promoting and rewarding collaboration with other actors, and having practitioners and business representative as lecturers. Participants also agreed on the urgency of unfreezing enrollments to doctoral programs and executive masters, which has hampered the vibrancy of scientific thinking in departments and has damaged the connection with the labor market.

VI. CONCLUSIONS AND RECOMMENDATIONS

6.1 Concluding Remarks

This research study sought to assess the existing practices of collaboration between universities and other actors in the Albanian society and to provide recommendations for enhancing the interactions among universities and external stakeholders in policy, business, and civil society. It utilized a combined methodology approach of mixed methods: survey and document analysis for quantitative data collection and in-depth interviews and focus groups for qualitative data collection. Two questionnaires were developed for this research: one for individual academics and staff at the partner universities and one for partner universities participating in the project (at an institutional level). Furthermore, in-depth interviews and focus group discussions were held with key representatives of the Quadruple Helix model.

Findings from this research study indicate that levels of collaboration between academia and other stakeholders remain low. According to survey results, most of this limited collaboration takes place with the business sector, followed by civil society, policy making sphere, and less so with media. In addition, most of this collaboration is established through individual networks and involves the provision of external expertise. Only collaboration with the policy sphere is established at an institutional level in the selected sample.

Limited research funds are identified as a major challenge for collaboration with other actors, with the majority of respondents stating that their fund their research through personal funds. In regard to accessing EU Research and Innovation funding, respondents report low levels of access. Difficulties in establishing cooperation offices within their respective institutions, setting independent agendas and managing the scarce resources for collaboration with other actors in society, and shortcomings of the higher education strategy (2015-2020) and of the applicable legislation contribute to such low levels of access.

Additionally,universities are subject to rigid bureaucracies and procedures, which hinder their abilities to take advantage of collaborative opportunities. Particularly, it is imperative to ease and streamline procedures and regulations that govern issues, such as curricula updates and project administration. At the same time , universities must establish mechanisms for recognizing and rewarding research work carried out by their faculty members. These would greatly improve the capacity of universities to respond to external developments, including adaption to market needs and engagement with stakeholders outside academia.

Despite the overall low levels of collaboration between researchers and other stakeholders, respondents indicate several reasons to

foster collaboration between the two groups as follows:

(i) professional growth and increase in revenue: networking, knowledge acquisition, skills development, financial gains, exchange of experiences, mobility options, public exposure, and diversification of expertise;
(ii) curricula development and improvement of teaching;
(iii) students' internships and job fairs;
(iv) contribution to regional development, community, and society at large (engaged university); and
(v) research quality and communication to diverse audiences; Access to data, technology, decision making processes and real-life problems; research funds and joint projects; collaborative research; publication of applied and policy-oriented research; and, communication to external audiences and wider publics.

University-to-Business Collaboration

Collaboration between researchers and the business sector remains at low levels. Two distinct perspectives emerged as to why there is low collaboration between academia and industry:

(i) a mismatch between the slow-paced academic research process and the quick-paced nature of decision-making in the private sector; and
(ii) misaligned perceptions of the needs and wants of the two parties. Respondents from academia find that there are few (if any) opportunities for collaboration, that the interest of business to fund research is low, and that they have incompatible research aims.

Respondents from both business community and university iterate that the curricula in Albanian universities are outdated and that they do not respond to market needs for expertise, with most recent graduates needing on-the-job training once they are hired. Additionally, both cite a lack of mutual trust and awareness on possibilities for collaboration.

The little collaboration that does take place is centered on consulting for business development, on market research and surveys, employees' training and capacity building, including human resources management. However, the most frequent type of activity includes coordination of students' internships, job placements, and organization of job fairs.

University-to-Policy Collaboration

Although infrequent, the majority of collaboration between university and policy happens at an institutional level. Researchers find that some of the reasons for the lack of cooperation with policy sector (local and central government) is lack of opportunity, lack of access to policymaking institutions, lack of joint projects to enable cooperation, lack of interest on both sides to cooperate, research focus not related to policy, and personal stance not to be involved in 'politics'.

Researchers collaborate with the policy sector in consultancies for drafting, reviewing, and evaluating national and/or local strategies, public policy documents and reports, capacity building and training, project writing, coordination of students' internships, job placements, and organization of job fairs, organization of conferences, seminars, and roundtables, legal consultations, and strategic planning on digitalization.

University-to-Civil Society Collaboration

There is low institutional collaboration between universities and civil society, mainly

due to lack of opportunity, lack of research interest, workspace restrictions, civil society not engaging in research activity, lack of common projects, and previous unsuccessful experience. However, collaboration at an individual level is frequent and consolidated. This usually happens as individual external expertise offered as part of short-term projects and as special activities and consultations to civil society organizations, based on connections made through individual networks.

The main activities stemming out of the collaboration with civil society include engagement in action and policy-oriented research, including involvement of students in the research, project writing and joint applications, capacity development programmes, project and research management, organization of conferences, seminars, workshops, open lectures, scientific publications, hackathons and other students-centered participatory activities, and institutional support.

University-to-Media Collaboration

A low percentage of respondents report collaborating with the media. Such collaboration was primarily initiated on the basis of donor-funded projects, from personal experience in the media and then transition to academia, personal connections and networks, as part of university marketing and public relations efforts, and involvement in civil society organizations working with media such as the Albanian Media Institute.

The low collaboration seems to stem from lack of demand for research results by media outlets and journalists, lack of opportunity, limited skills and expertise of researchers to communicate research findings, lack of contacts and facilitation of interactions, focus on academic career path and obtaining academic titles/degrees rather than communication of research, lack of personal interest for media presence, and lack of trust in journalists' capacities to present adequately scientific findings and results as reasons for the absence for more extensive collaboration with media.

Media representatives that participated in focus group discussions feel that universities see the collaboration with the media as a tool for being present in the news, but do not acknowledge that they are benefitting from a service which needs to be paid.

6.2 Recommendations for Universities

Respondents to the study strongly believe in the crucial role that universities play in society. From the desk and field research, and subsequent analysis, the following general recommendations arise:

- **Actualize and modernize the curricula**, so that universities do not produce only job-ready people but also life-ready people. Curricula should be updated and upgraded based on accurate market research and considerations about the institution's mission and vision. This would ensure that programs are designed to meet market needs and graduates are equipped with the tools to excel in their fields.
- **Ensure quality research** by investing in capacity building, so they can deliver on the expectation that their researchers can produce state-of-the-art research, that is useful to and usable by multiple actors in society. The latter needs to be coupled with efforts in sharing experiences and knowledge with the others.

- **Establish dedicated units to coordinate collaborations with society** such as Technology Transfer Offices, Cooperation Office, or Resource Centres, as well as databases of information that are open to third parties. These should not only address the lack of information, but also reduce the red tape for establishing institutional collaborations with different actors.
- **Recognize and reward engagement of their staff with research and other projects**. This could be achieved through amended job descriptions and financial rewards.
- **Institutionalize collaborations** by signing formal agreements as well as by scheduling frequent and regular meetings among involved stakeholders to agree on common interest agendas. Universities should also seek to expand areas of collaboration.
- **Administrative capacity workshops** should be led by proactive universities, where representatives from all parties (academia, business, civil society, and media) learn more about "administrative" topics, e.g., related to understanding the policy-making cycle, project application, fundraising, taxation, etc.
- **Develop organizational culture,** so that universities can embed in their working practices and culture of teaching and research the cooperation with other sectors in society so as to allow them to improve relevance of teaching, increase employability of graduates, increase relevance of research, enhance impact of research in society, secure funding for research and innovation, and improve their profile and brand recognition.
- Universities should **reach out to civil society organizations**, by sharing their plans in term of research, teaching, and other activities as well as possibilities to engage locally and set up joint research agendas and joint action at the local level. Also, universities should invite civil society organizations to be part of joint funding applications.
- Foster an internal culture of **orienting thesis development** towards issues relevant to development at the local level through cooperation with civil society organizations and other actors.
- Universities should make concerted efforts to improve **networking opportunities** for their staff and establish closer cooperation with the media by developing capacities for communicating their research.
- **Improve science and data journalism** curricula at university level both in public and private universities.
- Better and more qualitative **dissemination of research** by expanding their resources and build capacities of their public relations office, develop guidelines for researchers on how to engage with the media and train their staff in science communication techniques. This would ensure that:
  (i) There is increasing information about what types of research projects are currently being implemented by Albanian universities;
  (ii) There is an improved understanding on how research results can be useful for other stakeholders, particularly private sector companies; and, eventually,
  (iii) There is a gradual shift in the working culture in Albanian companies to embrace collaboration with the research sector. A good starting point for this would be to promote successful cases of collaboration, which would showcase the abilities of Albanian researchers, as well as the mutual benefits from such initiatives.

A series of recommendations specific to each stakeholder of the Quadruple Helix model include the following:

University-to-business:

- Maintain/establish dialogue fora with businesses, to help identify their needs in terms of human resources, innovations, and research.
- Guide thesis development towards the needs of the wider business sector.
- Invite private sector representatives that do not have doctorates to teach university courses in collaboration with lecturers so as to enhance the practical aspects of teaching and contextualize theoretical approaches.

University-to-policy:

- Advocate for issues of high interest, such as:
  - Reducing or eliminating bureaucracy for operating an intermediary office within the university's institutional structure, which can be independent in the administration of activities, finances, etc.;
  - Simplifying the process of changing or updating curricula;
  - Increasing funding dedicated to scientific research, which should be allocated through more transparent procedures.
- Guide research and thesis development towards major policy issues relevant to the country.
- Host discussion fora with policymakers before the preparation of key national documents, such as the National Strategy for Development and Integration, and align university research priorities to those relevant for policy makers.

University-to-civil society:

- Reach out to civil society organizations by sharing university plans in term of research, teaching, etc.
- Set up joint research agendas.
- Invite civil society organizations to be part of joint funding applications.
- Foster an internal culture of guiding thesis development towards issues relevant to civil society organizations.

University-to-media:

- Make concerted efforts to improve networking opportunities for their staff and establish closer cooperation with media.
- Cultivate relationships with media by dialoguing with media to design better curricula for selected programs, such as (investigative) journalism, as well as ensure job placement for their students.
- Ensure better and more qualitative dissemination of research by expanding their resources and build capacities of their PR office, draft guidelines for researchers on how to engage with media, and train their staff in science communication techniques.

6.3 Recommendations for the Business Sector

In order to foster collaboration with universities, the business sector should undertake the following activities:

- Be more proactive and open to possible ideas for cooperation with universities.
- Actively contribute to university curricula redesign. Additionally, it should invite universities to co-organize workshops, trainings, and/or webinars about emerging market trends, technologies, etc. that would benefit the business itself as well as lecturers and students.

- Contribute to career services in universities in order to guide university admissions and graduations to match their needs by subsidizing tuitions for a finite number of students enrolling in selected programs, and/or offering scholarships. Similarly, they could guide research by (co)financing research in selected topics.
- Maintain the already successful collaborations with university for internship programs, job fairs, and job placements, and adapt towards high-priority sectors such as ICTs, creative industries, and tourism. In this way, businesses can identify, recruit, and integrate graduates who fit their needs. At the same time, through this collaboration, businesses can secure upskilling competences and knowledge of current staff.
- Invest in research and development in partnership with universities to have access to latest discoveries and innovation, ensure access to knowledge to improve current processes, products, services, and other business activities, access to start-ups and spin-offs, and ensure raising of brand profile.

6.4 Recommendations for Policy Sphere

The policy sphere can play an important role in fostering collaboration between universities and other stakeholders by:

- **Exercising its regulatory role**, which impacts the research performance practices of universities and career path progress and shapes the intellectual property rights regime.
- **Improving the business climate and creating financial incentives in order to encourage the collaboration between universities and private sector companies**. These could take the form of tax incentives for businesses that offer scholarships, internships, and/or job placements for students.
- **Increasing the involvement of all line ministries**. Generally, higher education and scientific research are seen as the domain of the Ministry of Education, Sport and Youth (MoESY). However, one of the respondents believed that this is inaccurate for two reasons: (i) MoESY itself views higher education as distinct from scientific research. In fact, this is also reflected in the legal framework, with the recently terminated strategy for higher education lacking any measures pertaining to scientific research; and (ii) in order to promote Triple or Quadruple Helix collaboration models, it is imperative to undertake cross-ministerial efforts, so that all actors and sectors of national priority are duly represented.
- **Increasing public funding for research and improving NASRI's procedures of fund allocations**. NASRI's funding is particularly important for fostering the domestic research community given how difficult it is to access EU and other international research funding. The process by which NASRI's research funding is allocated (through thematic calls for proposals) should be as transparent and as efficient as possible. The funding should be used to:
  - Encourage collaboration between universities and other societal actors;
  - Align thematic calls for proposals with the national development priorities outlined in documents, such as the National Strategy for Development and Integration;
  - Promote open science, so that the research results that are generated

through public funds are made visible and accessible to everyone;
  - Promote cooperation of research units in the country and the Western Balkans region, as well as the joint use of research infrastructure (open infrastructure). One way to achieve this would be to implement soft measures or instruments, such as providing specific support services for networking, partner search, grant applications, and outreach activities to raise awareness on the relevance of collaboration.
- **Engaging with universities and other stakeholders to better face crisis** scenarios. In the framework of disaster risk reduction, the policy sphere should put in place practices and mechanisms that allow for quick and efficient engagement during crisis, to better curb the effects of such crisis and foster resilience.
- **Piloting initiatives of exposure between academia and the policy sphere** through:
  - Dedicated internship programs that would provide a valuable opportunity for future graduates and researchers to get acquainted with the dynamics and work processes in public institutions, private sector companies, and/or civil society organizations and media, or
  - "Second a researcher" initiatives, which would allow professionals and practitioners from policy institutions to spend time in an academic department and understand the scientific research process. The underlying assumption is that greater exposure would lead to a better grasp of the incentives and practices that govern these sectors and would, in turn, improve trust among the actors.

6.5 Recommendations for Civil Society

Civil society representatives interviewed for this study had diverging levels of confidence in the future of the *institutional* collaboration between universities and civil society. They believed that this collaboration is largely unnecessary given that individual researchers in academia and civil society are fully integrated with one-another, while cooperation at any institutional level would only bring more bureaucracy and no added value. In order to address these misperception, civil society organizations should:

- **Engage in building institutional bridges between civil society and academia** by:
  - Allowing university lecturers to serve some time as associate researchers in civil society organizations to sensitize them to the way civil society works, while lending their research skills to projects with direct societal interest/impact;
  - Creating a roster of experts in universities that civil society organizations could have access to when needing expertise; and,
  - Partnering for PhD research projects.
- **Contribute to increasing visibility of successful cases of collaboration** by promoting these in various outlets.
- Take advantage of the **EU integration process and its implications for** attitudes about and demand for research, involve universities in their continuous, thematic advocacy efforts.

6.6 Recommendations for Media

A series of recommendations emerge for the media sector as well:

- **Editorial policy** should be amended to include reports on universities' activities, such as research.
- **Editors-in-chief** should reach out to departments/universities of interest to establish frameworks for cooperation between the media and universities for fields of interest
- **Associations of journalists and media development organizations** should focus on training journalists on the use of research for reporting, thus fostering the linkages with universities, while increasing the quality of research.
- **Donor organizations** working with local media should include in their methodology elements of how to interact with academia for research informed reporting.
- **Journalists** should seek out support from researchers, on a personal and institutional level, to increase the quality of their reporting.

REFERENCES

Aarrevaaram T, Finkelstein, M, Jones, A.G, Jung J. *"Universities in the Knowledge Society: The nexus of national systems of innovation and higher education"* Volume 22 (The changing academy –the changing academic profession in international comparative perspective Springer:2021)

Bozeman B, Rimes.H, Youtie.J. "*The evolving state-of-the-art in technology transfer research: Revisiting the contingent effectiveness*" Research Policy Volume 44 Issue 1 (Elsevier:2015)

Centre of Official Publishing. *"Decision-For the approval of the National Plan for European Integration 2020–2022"* (Council of Ministers: Albania:2020)

Compagnucci L, Spigarelli.F. *"The Third Mission of University: A systematyc literatura review on potentials and constraints"* Technological Forecasting and Social Change Volume 161 (Elsevier:2020)

Cooke.J.S ,Gallagher, J.A,Sopinka.M.N, Nguyen.V, Skubel.A.R, Hammerschlag.N, Boon.S, Young.N , and Danylchuk.J.A." *Considerations for effective science communication*" FACETS No. 2(Facets: Canada: 2017)

Council of The European Union. "*Commission Staff Working Document Economic Reform Programme of Albania 2020-2022"* (European Council: Brussels:2020)

Curraj, E,Bino B et al. "*New dynamics in the interrelations between research and development in Albania: From National Innovation System towards the Triple Helix"* (UET: Tirana)

Decision No. 607. "*On the establishment, composition, organization and functioning of national agency for scientific research and innovation* (Akkshi)" (Council of Ministers:2016)

Decision No.75. "*On The Approval of the Financing Model of Public Institutions of Higher Education and Scientific Research"* (Council of Ministers:2018)

Elias G. Carayannis Campbell, D.F. "*Developed democracies versus emerging autocracies: arts, democracy, and innovation in Quadruple Helix innovation systems*" Journal of Innovation and Entrepreneurship 3, No**.**12 (Springer Open: 2014)

Elias G. Carayannis, David F.J. "*Mode 3' and 'Quadruple Helix: toward a 21st century fractal innovation ecosystem Campbell*" Int. J. Technology Management, Vol. 46, No. 3/4 (Inderscience Enterprises Ltd:2009) "

Elias G. Carayannis, Rakhmatullin, R. "*The Quadruple/Quintuple Innovation Helixes and Smart Specialisation Strategies for Sustainable and Inclusive Growth in Europe and Beyond*" Journal of the Knowledge Economy No.5 (SpringerLink:2014)"

Etzkowitz.H. *"The evolution of the entrepreneurial university"* (Int.J Technol Globalization:2004)

Eu Commision Research and Innovation. *"Towards a 2030 vision on the future of universities in the field of R&I in Europe" (*Eu Commision:European Union: 2020)

EUA- REGIO/JRC Smart Specialisation Platform Expert Workshop. "The role of universities in Smart Specialisation Strategies" (European University Association: Brusseles:2014)

European Commision. "*Speech by Commissioner Mariya Gabriel at the European R&I Days 2021"* (EU Commision: Brussels: 2021)

European Commision. "The Science of Citizen Science" (Science Hub: EU Springer: 2021)

European Commission. "*The European Research Area (ERA) is the ambition to create a single, borderless market for research, innovation, and technology across the EU"* (EU Commission:2021)

European Commission *"Albania- Horizon 2020"* Policy Background (EU Commision:2020)

European Commission. *"Albania Horizon 2020"* Country Profile (EU Commision:2020)

European Commsision. *Smart Specialisation Platform-Albania* (EU Commision:2020)

European-Commission. *"Albania 2020 Report"* (EU Commission: Brussels: 2020)

Fora.D, Goddard.J, Beldarrain.G.X, Landabaso.M, McCann.P, Morgan.K Nauwelaers.C, Argilés.O.R. "*Guide to Research and Innovation Strategies for Smart Specialisation (RIS 3)*" (European Union: Luxembourg: 2012)

Gastil.J."*Designing Public Deliberation at the Intersection of Science and Public Policy*" The Oxford Handbook of the Science of Science.Communication (Oxford University Press/Handbooks:Oxford:2017)

Giuri.P, Munari.F, Scandura.A, Toschi.L "*The strategic orientation of universities in knowledge transfer activities*" Technological Forecasting and Social Change Vol.138 (Elsevier:2019)

Hasche.N, Höglund.L, Linton.G. "*Quadruple helix as a network of relationships: creating value within a Swedish regional innovation system*" Journal of Small Business & Entrepreneurship, Vol. 32, No. 6 (Routledge Taylor and Francis Group: Sweden: 2020)

Haxhi.F et al. *"Smart Specialisation Process in Albania"* (IPA CBC Italy-Albania-Montenegro:2021)

Jorgensen. TH. *"Universities and innovation beyond the third mission"* (European Universities Association:2019)

Kappel.K, Holmen.J.S. "*Why Science Communication, and Does It Work? A Taxonomy of Science Communication Aims and a Survey of the Empirical Evidence* Science and Environmental Communication" (Frontiers:2019)

Leydesdorff. L. "*The Triple Helix of University-Industry-Government Relations*" (University of Amsterdam: Amsterdam:2012)

Ministry of Education and Sports of Albania. "*Draft-National Education Strategy 2021-2026*" (Ministry of Education and Sports: Albania: 2021)

Ministry of Education and Sports of Albania. "*The Albanian Law No. 80/2015*"

Ministry of Education and Sports of Albania.*"Draft-University Pact"*(Ministry of Education and Sports: Albania:2019)

Ministry of Infrastructure and Energy. "*National Plan for Sustainable Development of Digital Infrastructure, Broadband 2020-2025" (*Ministry of Infrastructure and Energy: Albania: 2020)

Ministry of Education and Sports of Albania. "*National Agency for Scientific Research and Innovation* (Akkshi)" (Council of Ministers:2016)

OECD. "*Commercialising Public Research New Trends and Strategies*" (Organization for Economic Cooperation and Development: Paris:2013)

OECD. "*University-Industry Collaboration New Evidence and Policy Options*" (OECD: Paris: 2019)

Pique, J.M., Berbegal-Mirabent, J. & Etzkowitz, H. "*Triple Helix and the evolution of ecosystems of innovation: the case of Silicon Valley"* (Triple Helix 5**:**2018)

Policy Learning Platform on Research and Innovation. "A Policy Brief -Smart Specialisation Strategy(S3)" (European Regional Fund: European Union:2020)

Reichert.S et al. "*The Role of Universities in Regional Innovation Ecosystems* European University Association" (EUA: Belgium:2019)

Schoonenboom, J & Johnson, R.B. "*Mixed methods research is the type of research in which a researcher or team of researchers combines elements of qualitative and quantitative research approaches (e.g., use of qualitative and quantitative viewpoints, data collection, analysis, inference techniques) for the broad purposes of breadth and depth of understanding and corroboration".* (Kolner Zeitschrift Fur Soziologie und Sozialpsychologie : Springer:2017)

Schütz.F, Heidingsfelder L. M, Schraudner.M. "*Co-shaping the Future in Quadruple Helix*

Innovation Systems: Uncovering Public Preferences toward Participatory Research and Innovation" She Ji: The Journal of Design, Economics, and Innovation Volume 5, Issue 2 (ScienceDirect:2019)

Snellman C.L. "*University in Knowledge Society: Role and Challenges*" Journal of System and Management Sciences Vol. 5 No.4 (ISNN: Finland:2015)

SPHERE. "*Harnessing the potential: Research Capacity in the Western Balkans*"-Report *(Sphere:2018)*

T. W. Burns, D. J. O'connor, S. M. Stocklmayer. "*Research Perspective: Science Communication: A Contemporary Definition Public Understanding of Science*" No.12 (Sage Publications:2003)

Tandon.R et al. "*University-Civil Society Relations: Partnership of Respect*" (Durban: South Africa: 2017)

Trencher, G., Yarime, M., McCormick, K., Doll, C, Kraines, S., & Kharrazi, A. "*Beyond the Third Mission: Exploring the Emerging University Function of Co-creation for Sustainability*" (Science and Public Policy 41(2): Lund University: 2014)

UN."*The Sustainable Development Goals Report 2020*" (United Nations:2020)

United Nations 2030 Agenda. "*17 Goals*" (Department of Economic and Social Affairs/ Sustainable Development: UN: 2018)

Vohland K. et al. "*The Science of Citizen Science*" Editorial: The Science of Citizen Science Evolves (Springer:2021)

Vohland K., Schade, S. "*Survey on Citizen Science Strategies and Initiatives: report on outcomes in Europe: Technical Report on Outcomes*" (Ispra: European Commission 2021)