JRIHE
JOURNAL OF RESEARCH AND INNOVATION IN HIGHER EDUCATION

Vol. 5, No. 1 (Spring 2024)
ISSN: 2960-4419 (Online)
https://doi.org/10.48341/rbjz-1y76

Responsible research assessment reform in Europe: Where does Georgia stand?

Nino Gogadze[1]

[1] *PhD candidate at the Centre for Science and Technology Studies (CWTS), Leiden University, The Netherlands,* nino.gogadze.sps.tsu@gmail.com, **ORCID**: 0009-0006-4498-9481

Suggested citation: Gogadze, N. (2024). Responsible research assessment reform in Europe: Where does Georgia stand? *Journal of Research and Innovation in Higher Education, 5*(1), 57-85.

The article is available online at: www.rihe-journal.com

Acknowledgement

This article contribution is based on course work the authors submitted in the Master in Research and Innovation in Higher Education (MARIHE), supported by the Erasmus Mundus programme of the European Commission.

Abstract

The study explores the implementation of the CoARA agreement in a non-EU, post-Soviet context and presents the current state of research assessment external policies and challenges faced by Georgian signatories to the CoARA agreement. The purpose of this study was twofold: firstly, to explore the implementation of the CoARA agreement in Georgia; and secondly, to evaluate Georgia's position within the ongoing responsible research assessment reform in Europe, while also offering future prospects for adapting the CoARA agreement to Georgia's context.

To achieve these research objectives, a qualitative multiple case study design was employed. Georgia and Austria were selected for their distinct perspectives: Georgia offers insights from a non-EU, post-Soviet context, while Austria represents the EU context. The study used two different data collection methods: desk research for secondary data and semi-structured interviews for primary data collection. The documents analyzed during the desk research included legislation, strategic and policy documents, as well as institutional policies from the National Center for Educational Quality Enhancement and the Shota Rustaveli National Science Foundation of Georgia. The second phase of the research involved interviews with representatives from signatory organisations of the CoARA agreement and other relevant stakeholders engaged in research assessment in Georgia and Austria.

The findings of the study indicate that the state of research assessment in Georgia reflects a mixed landscape of progress and challenges. While discussions around research assessment are prevalent, Georgia is in the early stages of responsible research assessment reform compared to developments in Europe, particularly in Austria.

***Keywords**:* Responsible Research Assessment, CoARA, Research Evaluation, European Research Area, Post-Soviet Countries, Georgia, Austria.

Introduction

In recent years, Responsible Research Assessment has gained growing importance within the European Research Area and has emerged as a focal science policy objective. In 2021, the European Commission (EC) released a scoping report and proposed a coalition

approach for research assessment reform (European Commission, 2021), which set the groundwork for the establishment of the Coalition for Advancing Research Assessment (CoARA) and the Agreement on Reforming Research Assessment [1] (CoARA web site, 2024). This development is also relevant for Georgia, which was granted candidate status for EU membership in December 2023 and is an associated country of the Horizon Europe (European Commission, 2024). While studies confirm the need to reform the existing research evaluation system in Georgia (State Audit Office of Georgia, 2014; Tabatadze & Chachkhiani, 2022; Macharashvili & Gogadze, 2023; Tsotniashvili, 2023), as of January 2024, only three organizations from the country have joined the CoARA agreement: two private higher education institutions (out of a total of 56) and the main research funding body —the Shota Rustaveli National Science Foundation of Georgia (CoARA Web site, 2024).

Nowadays, research evaluation has become a challenge in Georgia, where, due to the Soviet legacy, university-based research is a relatively new phenomenon, as in the Soviet Union, the research was predominantly carried out by the specialized research institutes operated under the Academies of Sciences, resulting in a distinct separation between teaching and research activities, with higher education institutions playing a minor role in the production of new knowledge (Chakhaia & Bregvadze, 2018; Chankseliani et al., 2021; Chankseliani, 2022; Lovakov et al., 2022; Tabatadze & Chachkhiani, 2022; Macharashvili & Gogadze, 2023; Tsotniashvili, 2023).

Despite efforts to align with European standards, the research assessment system in Georgia remains "fragmented, inefficient, and ineffective" (State Audit Office of Georgia, 2014; Tabatadze & Chachkhiani, 2022; Macharashvili & Gogadze, 2023). There is an increasing need for comprehensive reform in research assessment practices and support for early-career researchers in Georgia (Dzotsenidze, 2022; Tabatadze & Chachkhiani, 2022; Macharashvili & Gogadze, 2023). Given that the CoARA Agreement is a recent development, this study represents the first attempt to explore its implementation in Georgia.

[1] Also referred to as the CoARA agreement and ARRA, these terms are used interchangeably within the current study.

This underexplored area presents an opportunity to not only fill this critical gap but also to provide practical insights that can inform policy decisions and contribute to the further development of the system.

Research purpose and questions

The purpose of this study was twofold: first, it aimed to investigate the implementation of the CoARA agreement in Georgia, and second, to evaluate Georgia's position within the ongoing responsible research assessment reform in Europe, while also offering future prospects for adapting the CoARA agreement to Georgia's context. By assessing Georgia's position within the broader European context, this study aimed to shed light on the challenges and opportunities facing the country in its efforts to reform research assessment practices.

To achieve the research purpose, the following main research question and sub-questions were set:

Main Research Question: How can the CoARA agreement be adapted to address the specific context of Georgia's research system?

Sub-Questions:

(RQ1) What is the current state of research assessment in Georgia?

(RQ2) What challenges exist in Georgia concerning the CoARA agreement implementation?

(RQ3) How is the CoARA agreement being implemented in EU countries, particularly in Austria, and how can the Austrian experience be beneficial for Georgia?.

Research method

In this exploratory study, a qualitative multiple case study design was employed to achieve the research objectives. The rationale behind choosing qualitative research is to address complex research questions that require in-depth exploration (Creswell, 2014). Alongside Georgia, the case of Austria has been carefully selected for inclusion in the study. The country selection strategy follows a 'diverse cases' design (Seawright & Gerring, 2008): each country offers a unique perspective on research assessment practices and policies - Georgia from a non-EU, post-Soviet context and Austria from the EU context.

The study employed two distinct data collection methods: desk research for secondary data and semi-structured interviews for primary data. The research was conducted in two stages. The first stage involved desk research, which included analyzing legislation, strategic and policy documents, and institutional policies of the National Center for Educational Quality Enhancement (NCEQE) and the Shota Rustaveli National Science Foundation of Georgia (SRNSFG).

The documents analyzed during this stage comprised:

Legislation:

- Law of Georgia on Higher Education
- Law of Georgia on Science, Technology and Their Development
- Law of Georgia on Education Quality Improvement
- Law of Georgia on the Georgian National Academy of Sciences

Strategic and Policy Documents:

- Unified National Strategy of Education and Science of Georgia for 2022-2030
- Development Strategy of Georgia - Vision 2030
- Action Plan of the Development Strategy of Georgia - Vision 2030
- Government Programme 2021-2024: Toward Building a European State
- Georgia Report 2023 – European Commission, European Neighbourhood Policy and Enlargement Negotiations (DG NEAR), 2023 Communication on EU Enlargement Policy

Institutional Policies:

- Institutional Authorization and Accreditation Policies by the National Center for Educational Quality Enhancement
- Strategy and Action Plan, research assessment policies of the Shota Rustaveli National Science Foundation of Georgia

Secondary data was gathered from publicly available documents and reports on the official websites of Georgian participant organizations and relevant governmental bodies. Governmental documents, including strategy and evaluation reports, were accessed through the Ministry of Education and Science of Georgia (http://mes.gov.ge) and the Government of Georgia (https://www.gov.ge/). Legal documents were obtained from the

Legislative Herald of Georgia (http://matsne.gov.ge/). Additionally, reports and statistics were sourced from international and local organizations such as the EC, UNESCO Institute for Statistics, the World Bank, and the National Statistics Office of Georgia.

The second stage of the research involved semi-structured interviews with representatives from the CoARA agreement signatory organizations and other relevant stakeholders involved in research assessment in Georgia and Austria. In total, ten interviews were conducted, with five from Georgia and five from Austria. Table 1 provides a summary of the main characteristics of the participants:

Table 1: Characteristics of the study participants. Source: Author´s own elaboration.

Country	**Organization**	**Signatories of CoARA Agreement**	**Management Level**
Georgia	Petre Shotadze Tbilisi Medical Academy	YES	Top
	David Tvildiani Medical University	YES	Middle
	National Center for Education Quality Enhancement	NO	Top
	Ministry of Education and Science of Georgia	NO	Middle
	Shota Rustaveli National Science Foundation	YES	Middle
Austria	University of Continuing Education Krems (UWK)	YES	Top
	University of Graz	YES	Middle
	AQ Austria	NO	Middle
	Austrian Platform for Research and Technology Policy Evaluation	NO	Top
	FWF (Austrian Science Fund)	YES	Middle

Organizations from Austria were selected through convenience sampling, with participation requests sent to their official email addresses. Following the principle of homogeneity in the study (research performing organizations, research funding organizations, national agencies/policymakers), organizations that agreed to participate were included in the study. For participant selection in Georgia, a purposive sampling approach was employed. Contact details were acquired from the organizations' official websites. Most participants were initially contacted via email, but occasionally by phone or instant messaging as well.

Following the document analysis, interviews were conducted between February 28 and April 24, 2024.

Theoretical framework

The institutionalization of national level research assessment systems and research related quality assurance state mechanisms began in the second half of the 20th century, driven by a wave of reforms in higher education and the research sector inspired by New Public Management (NPM) (Sporn, 2003; de Boer et al., 2007; Hammarfelt & Hallonsten, 2022). NPM, often referred to as neoliberal reforms, aimed to enhance the efficiency, effectiveness, accountability, and performance of the public sector, including higher education and research, by adopting managerial and market-oriented approaches, outcome-oriented policies, and a focus on achieving measurable results (de Boer et al., 2007).

While NPM brought improvements in efficiency and accountability within higher education and research sector, it also faced criticism. Critics argued that the narrow focus on results lead to unintended consequences, such as fragmentation and diminished coordination (Broucker et al., 2017). Broucker et al. (2017) argue that this instrumental approach to higher education and research policies confronts the traditional roles and values of higher education institutions. Consequently, higher education reforms based on NPM do not fully enable higher education to realize its public value, as NPM's perspective on higher education is too narrow and fails to provide a clear understanding of reform outcomes and their impact on society.

Broucker et al. (2017) proposed a new model for studying reforms based on the concept of public value (PV), which extends beyond NPM principles, focusing on multiple objectives, broader outcomes than monetary benefits (including societal relevance), and contextual factors. Given that the CoARA agreement places a much greater emphasis on the societal relevance and public value of research than previous research evaluation movements, leveraging the public value theory proposed by Broucker et al. (2017) provides a framework for understanding the responsible research assessment movement in Europe. However, since Georgia does not yet have a mature research evaluation system (Tabatadze & Chachkhiani, 2022; Macharashvili & Gogadze, 2023), it is important to consider NPM principles as well.

EU policy context and the emergence of Responsible Research Assessment Reform

Responsible research, as a term, is rooted in EU science policy discourse, particularly within the EU Framework Programmes (FPs). It first appeared in the 6th Framework Programme, where "responsible research" was introduced to emphasize collaboration and dialogue among diverse stakeholders concerning the ethical dimensions of science and technology (Burget et al., 2017). The term continued to gain prominence within subsequent FPs, notably Horizon 2020 (FP8) and the latest Horizon Europe (FP9) initiative (Owen et al., 2012; Burget et al., 2017).

Responsible Research Assessment Reform in Europe represents a shared vision to address current limitations in research assessment practices. The emergence of the term "responsible research assessment" in EU science policy reflects the increasing emphasis on aligning research evaluation procedures with the principles of responsible research and innovation. The EC's scoping report towards a reform of the research assessment system (2021) defines responsible research assessment as '*an umbrella term for approaches to assessment which incentivize, reflect, and reward the plural characteristics of high-quality research, in support of diverse and inclusive research cultures' (p. 21)*[2].

[2] The definition is provided by y Curry et al., (2020) in their report on "The changing role of funders in responsible research assessment: progress, obstacles & the way ahead".

Since the 2010s, there has been a significant rise in research assessment initiatives, movements, and reforms. One of the pioneering initiatives during this time was the establishment of the EC's expert group on University-Based Research Assessment, which led to the development of a multidimensional framework in 2010 to evaluate the quality of university-based research (European Commission, 2010). Following this, research assessment became a key topic of debate within the European research policy agenda, particularly within the domains of open science and research integrity. In 2018, the EC has urged member states to revise their policies on research assessment (Commission Recommendation (EU) 2018/790 of 25 April 2018). Consequently, in 2021, the EC released a scoping report, providing an overview of the assessment practices implemented across Europe and proposed a coalition approach for reforming research assessment practices across Europe (European Commission, 2021). Since 2021, the European movement to reform research assessment has gained significant momentum. This initiative laid the groundwork for establishing the CoARA and introducing the ARRA in 2022 (CoARA Website, 2024).

The CoARA agreement establishes common principles for assessment criteria and processes, with a strong emphasis on peer review and the responsible use of quantitative indicators (CoARA Website, 2024). Additionally, it underscores the values such as transparency, open science, ethics and integrity, collaboration, diversity and inclusiveness, while discourages the use of global rankings in research assessment. Complementing these core tenets, the agreement's supporting commitments provide additional guidance for advancing responsible research assessment practices. It sets a common direction for stakeholders, including research-performing and funding organizations, to drive advancements while respecting institutional autonomy.

Research assessment reform is also part of the European Research Area (ERA) 2022-2024 policy agenda, which outlines a comprehensive strategy aimed at aligning research policies across member states. This agenda encompasses twenty distinct actions designed to foster cohesion and collaboration within the European research landscape. Action 3 is particularly dedicated to advancing the reform of the assessment system for research, researchers, and institutions, aiming to enhance their quality, performance, and impact. Additionally, complementary actions have been launched to promote open science (ERA

Action 1), supporting research careers (ERA Action 4), empowering higher-education institutions (ERA Action 13), and enhancing research managements' strategic capacity (ERA Action 17).

As of May 2024, the ARRA has over 600 signatories across Europe (See Figure 1). Although the CoARA agreement originated from the EU, its adoption varies across different regions of the EU, as illustrated in Figure 2.

Figure 1: Number of the ARRA signatories per country (May, 2024). Source: CoARA's web site, https://coara.eu/

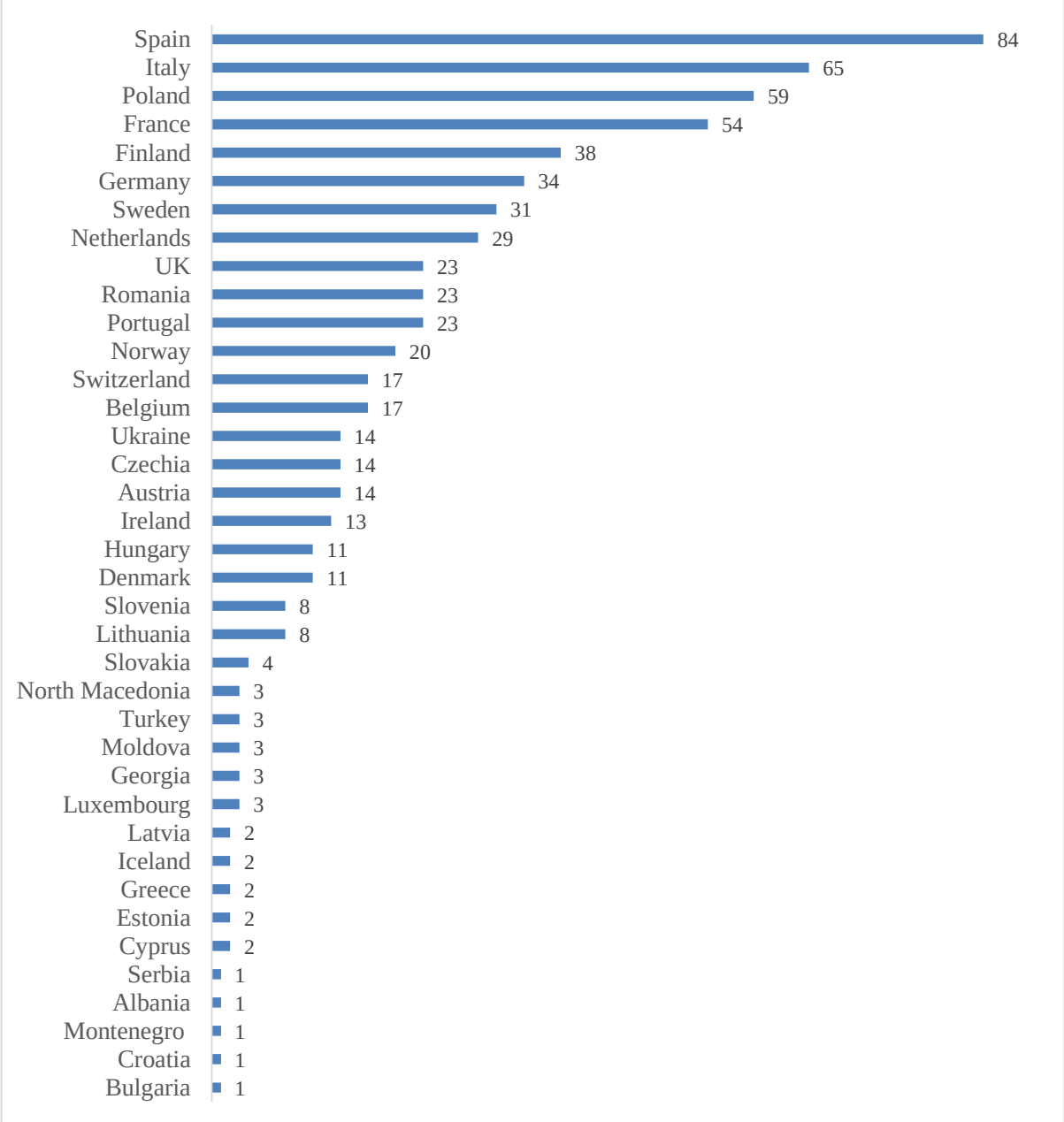
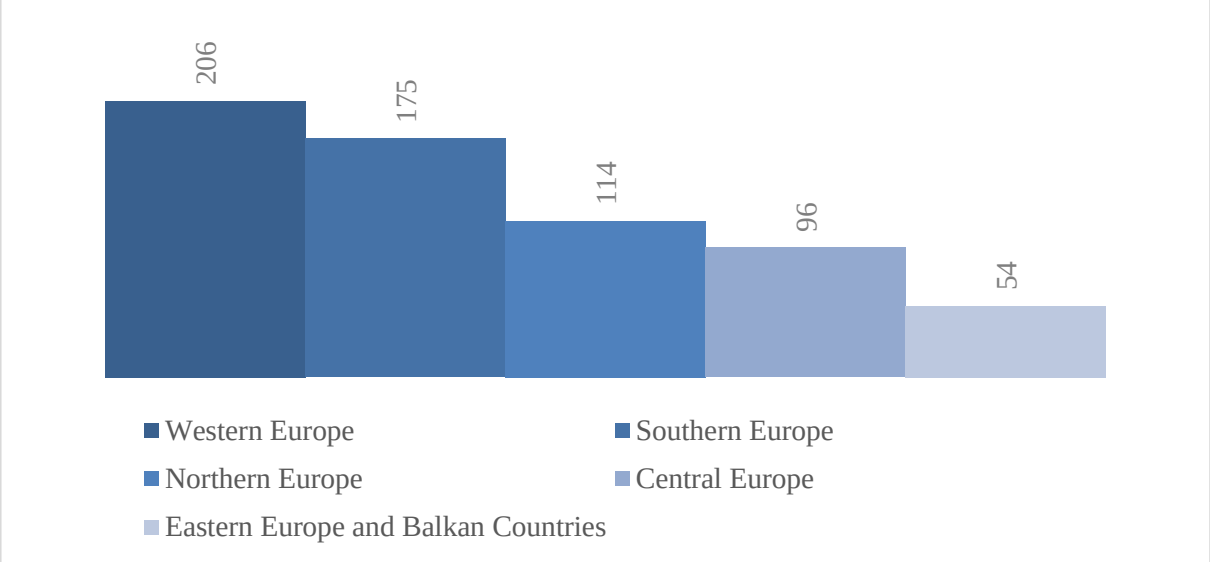


Figure 2: Number of the ARRA signatories by the EU regions (May, 2024).

Source: CoARA's web site, https://coara.eu/ Author's own elaboration.

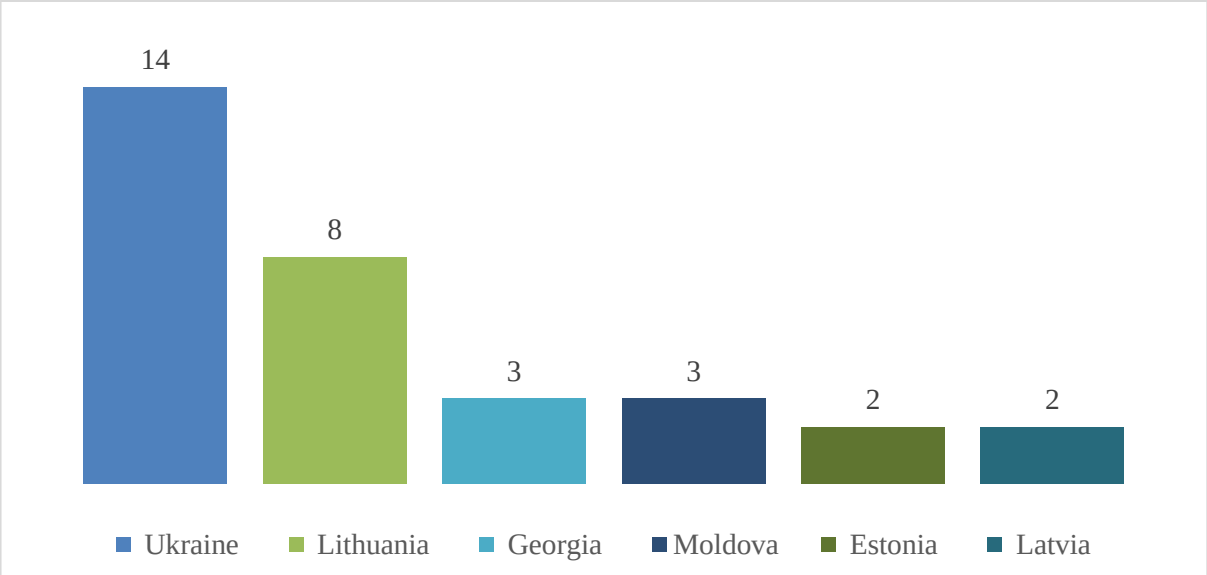


***The regional dimensions are made according to the Erasmus+ call for European University Alliances and modified by the author. All countries are associated with the Horizon Europe:*

- *Western Europe: Austria, Belgium, France, Germany, Ireland, Luxembourg, Netherlands, Switzerland, UK*
- *Southern Europe: Cyprus, Greece, Italy, Malta, Portugal, Spain*
- *Northern Europe: Denmark, Estonia, Finland, Latvia, Lithuania, Sweden, Norway, Iceland*
- *Central Europe: Czech Republic, Hungary, Poland, Slovakia, Slovenia*
- *Eastern Europe and Balkan Countries: Albania, Bulgaria, Croatia, Romania, Georgia, Ukraine, Moldova, Turkey, North Macedonia, Montenegro, Serbia*

As for post-Soviet countries, 6 out of 15 signed the ARRA: Ukraine, Lithuania, Latvia, Estonia, Moldova, and Georgia (See Figure 3). Ukraine leads this group with 14 signatories (as of May, 2024). Notably, Georgia is the only country from the South Caucasus represented.

Figure 3: Number of the ARRA signatories from Post-Soviet countries (May, 2024). Source: CoARA's web site, https://coara.eu/ Author's own elaboration.



Research and development in Georgia: Context overview

Georgia's higher education and research system emerged during the 20th century under the influence of the Soviet Union (Chakhaia & Bregvadze, 2018). The Soviet model of higher education and research operated with several distinctive features. According to Chakhaia & Bregvadze (2018), firstly, it was highly centralized, emphasizing strong government control and coordination; secondly, there was a clear division between the roles of higher education institutions and research institutes under the Academy of Sciense; thirdly, the system was primarily composed of public organisations funded by the state.

The dissolution of the Soviet Union in 1991 marked a significant shift in the higher education and research systems of these countries, as they transitioned and created their independent national models.After the dissolution of the Soviet Union, former Soviet republics chose diverse trajectories of political, economic and social development (Huisman et al., 2018). Georgia declared independence on April 9, 1991, months before the dissolution of the Soviet Union on December 25, 1991. However, no significant changes in science management were implemented until 2005 (Chakhaia & Bregvadze, 2018). During this period, one of the most notable features of Georgia was widespread

corruption, which extended to various sectors, including higher education (Chakhaia & Bregvadze, 2018; Jibladze & Glonti, 2020).

The Rose Revolution in 2003 marked a turning point for Georgia, leading to the subsequent New Public Management (NPM) inspired reforms introduced by the new government. These reforms aimed to dismantle the Soviet legacy, eliminate corruption, and enhance transparency, efficiency, effectiveness, accountability, and performance in the public sector, including higher education and research (Jibladze, 2017; Chakhaia & Bregvadze, 2018; kobakhidze & samnisahvili, 2022).

As per Lovakov et al., (2022), Georgia is classified among the radical reformers restricted the authority of their national academies of sciences. In 2005, by government decision, all research institutions were separated from the Georgian National Academy of Sciences and became part of the MoES. Later, between 2010-2011, around 70 research institutions were merged with 7 universities (European Commission, 2017). The reform aimed to integrate teaching and research within universities and foster university-based research. This structural change marked a significant shift from the Soviet to Humboldtian model of university. Meanwhile, the Academy of Sciences remained as a symbolic reputational institution (Chakhaia & Bregvadze, 2018).

The integration of universities and research institutions in Georgia positively impacted national research performance, as indicated by Lovakov et al., (2022). However, according to the 2014 report by the State Audit Office on the efficiency of Georgia's science management system, “the integration took place only physically, while no complex measures were taken for producing synergy effectively” (p. 37). Yet to this day, the integration remains superficial and the implementation of the reform remains incomplete, as highlighted by various sources (Bregvadze et al., 2014; State Audit Office of Georgia, 2014; European Commission, 2017; Tabatadze & Chachkhiani, 2022; Tsotniashvili, 2023).

Joining the Bologna Process marked a significant milestone in Georgia's transition from the Soviet model to the European higher education area (Jibladze, 2017). In 2005, Georgia became a member of the Bologna Process and, in accordance with the Bologna

Declaration, implemented three-cycle studies and doctoral education programmes. Additionally, external quality assurance measures were introduced, and the authority to issue doctoral degrees was exclusively granted to universities (Chakhaia & Bregvadze, 2018).

The NPM inspired reforms in Georgia's higher education and research system also involved the establishment of agencies under the Ministry of Education and Science to decentralize operations, enhance accountability, and improve efficiency (Jibladze, 2017). This included the establishment of the National Education Accreditation Center in 2006, which later became the National Center for Educational Quality Enhancement (NCEQE) in 2010 (Chakhaia & Bregvadze, 2018). Additionally, research funding organizations such as the National Science Foundation (NSF) and the Foundation for Georgian Studies, Humanities, and Social Sciences (Shota Rustaveli Foundation) were set up in 2005. In 2010, these two research funding organizations merged and formed the SRNSFG (Tabatadze & Chachkhiani, 2022).

In parallel with the aforementioned structural changes, there was a notable decrease in direct state funding for research, accompanied by a shift from lump-sum to competitive project-based funding in 2005 to support high-quality research (The World Bank, 2018). Nowadays, the main research funding body in Georgia is the SRNSFG, which provides state-funded open grant calls for basic and applied research and different targeted funding programs for researchers and research organizations (European Commission, 2017). Furthermore, the government also provides direct institutional funding for public research universities in a lump-sum form, which rarely covers the salaries of the researchers and operational costs of the research institutes (European Commission, 2018). It should be noted that the amount of institutional research funding for public universities is not based on a formula and is a subject to annual negotiation (The World Bank, 2018).

Georgia's research capacity: Key insights

According to the latest data from the World Bank in 2020, among 15 post-Soviet countries, only three (Estonia, Lithuania, and Russia) allocate more than 1% of GDP to R&D, with Estonia and Lithuania being EU members. Notably, Estonia leads among the post-Soviet republics with the highest R&D spending at 1.75% (see Table 2).

Table 2: GERD: Post-Soviet Countries, 2000-2020.

Source: The World Bank, https://data.worldbank.org/

YEAR / COUNTRIES	2000	2005	2010	2015	2020
Armenia	0.19	0.26	0.24	0.25	0.21
Azerbaijan	0.34	0.22	0.22	0.22	0.22
Belarus	0.72	0.68	0.67	0.50	0.54
Estonia	0.60	0.92	1.58	1.47	1.75
Georgia	0.22	0.18	N/A	0.30	0.30
Kazakhstan	0.18	0.28	0.15	0.17	0.13
Kyrgyz Republic	0.16	0.20	0.16	0.12	0.09
Latvia	0.43	0.53	0.61	0.62	0.69
Lithuania	0.59	0.75	0.78	1.04	1.15
Moldova	N/A	0.40	0.37	0.31	0.23
Russian Federation	1.05	1.07	1.13	1.10	1.09
Tajikistan	N/A	0.10	0.09	0.10	0.09
Turkmenistan	N/A	N/A	N/A	N/A	N/A
Ukraine	0.93	1.00	0.80	0.61	0.40
Uzbekistan	0.36	0.24	0.15	0.16	0.14

When examining the percentage of GDP allocation on Research R&D for post-Soviet countries in comparison to other nations such as South Korea, the U.S., Japan, China, and the EU average, it becomes evident that R&D spending in post-Soviet countries is relatively low (See Figure 4). Even in the case of Estonia and Lithuania, both fall into the "Medium" spending category. In contrast, Georgia falls within the "Low" spending category (See Figure 4 and 5), allocating 0.3% of its GDP on R&D. This places Georgia in the 8th position in terms of R&D spending among these nations (See Figure 5).

Figure 4: GERD: Post-Soviet Countries and Other Nations, 2020.

Source: The World Bank, https://data.worldbank.org/

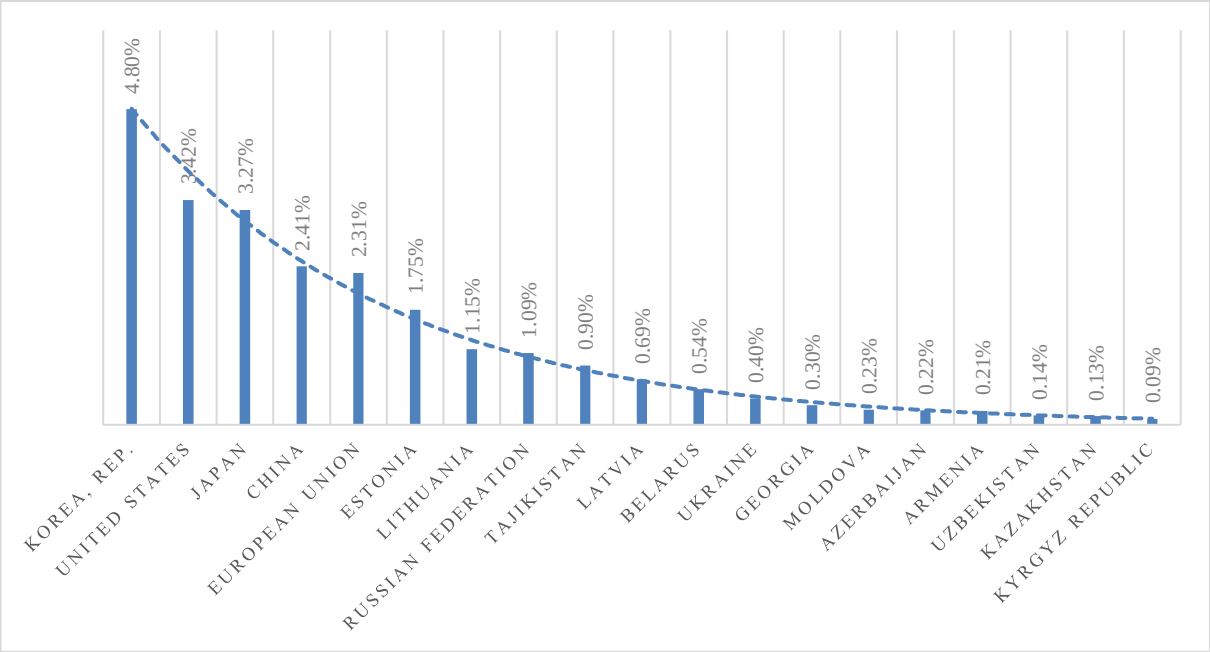
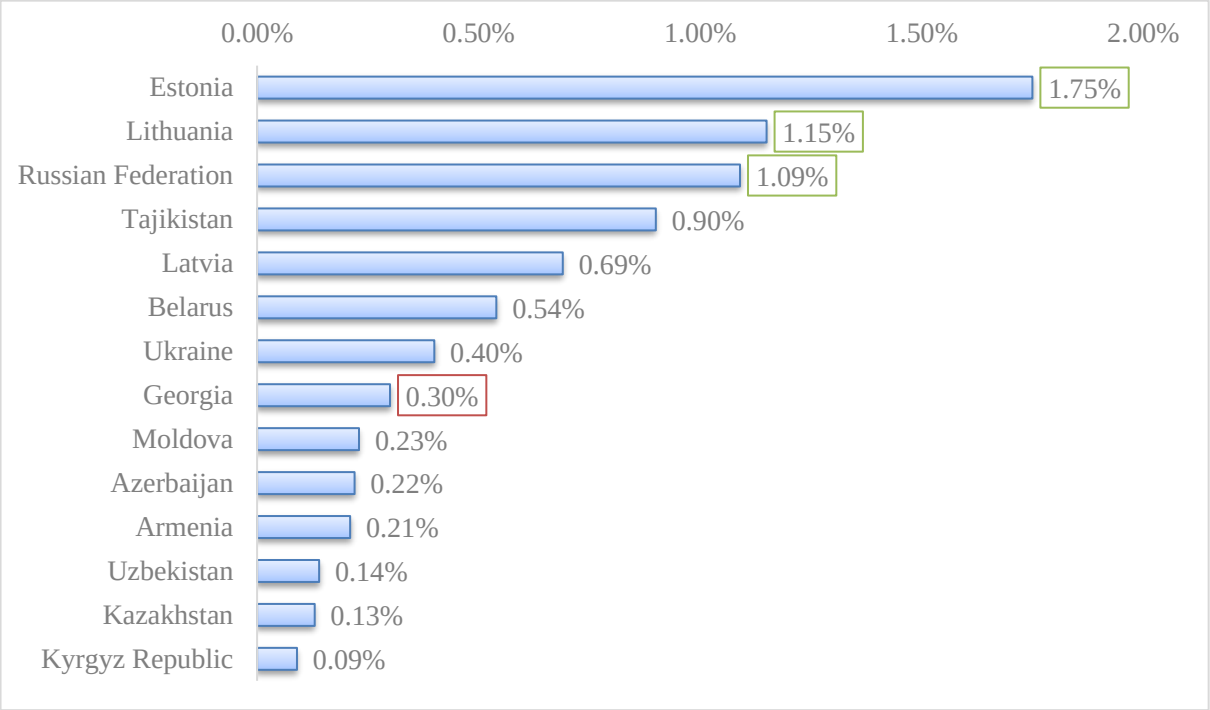


Figure 5: GERD: Post-Soviet Countries, 2020.

Source: The World Bank, https://data.worldbank.org/



Concerning the sustainability and potential of scientific research, an analysis of data over the last decade reveals an upward trend in the number of full-time equivalent researchers

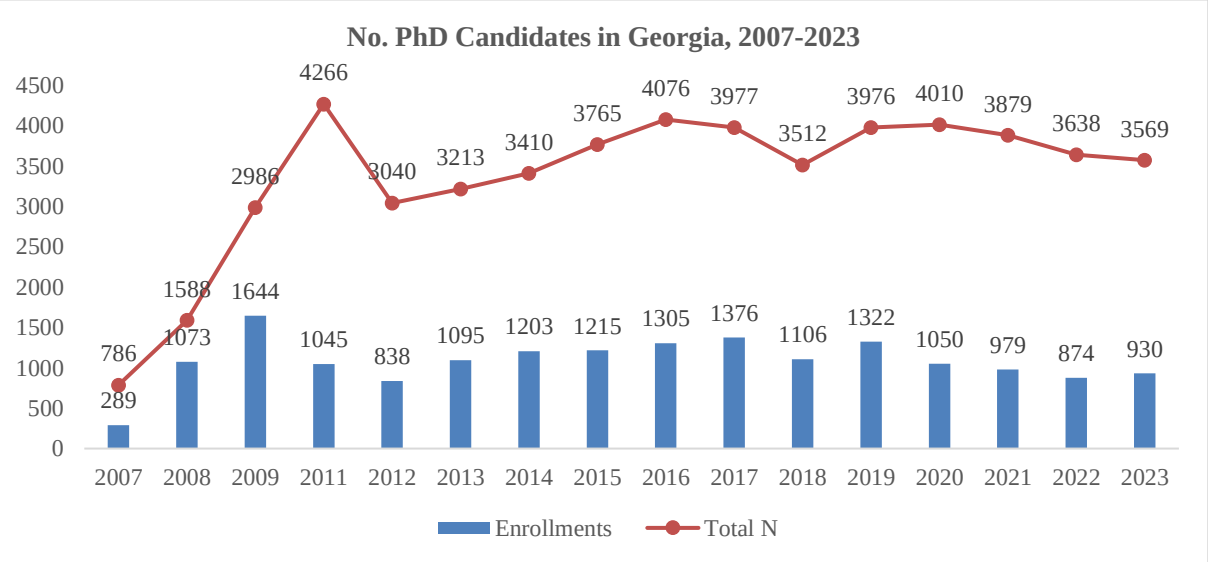
per million inhabitants in Georgia (see Table 3). According to the latest data from the UNESCO Institute of Statistics (2021), the number of full-time equivalent researchers per million inhabitants in Georgia (1717) exceeds the average for upper-middle-income and Central Asian countries, although it remains significantly lower than the EU average of 3817 (See Table 3).

Table 3: Researchers (in full-time equivalent) per million inhabitants.
Source: UNESCO Institute of Statistics, http://data.uis.unesco.org/

Country	2015	2016	2017	2018	2019	2020	2021
Georgia	1366	1391	1390	1553	1800	1812	1717
Europe	3320	3365	3465	3573	3663	3700	3817
Central Asia	632	607	585	580	628	642	662
Upper middle income countries	1021	1056	1074	1131	1228	1291	1328

Furthermore, according to the National Statistics Office of Georgia, the number of PhD enrollments and the total number of PhD candidates have been decreasing since 2019 (See Figure 6). However, the reasons for this decline have not been reported.

Figure 6: Number of PhD Candidates in Georgia, 2007-2023.
Source: National Statistics Office of Georgia, https://www.geostat.ge/en



Furthermore, according to the Scimago Journal & Country Rank, Georgia ranks 88th among 243 countries in terms of the number of scholarly outputs published in the Scopus database (Scimago Journal & Country Rank, 2024). Besides, based on the same data, Georgia secures the 8th position among the post-Soviet Republics (See Figure 7). Moreover, the data reveals that in terms of the H-index, Georgia ranks 5th among the former Soviet republics (See Figure 8).

Figure 7: SCImago Rankings of the Post-Soviet Countries, Scopus database, 1996-2023. Source: SCImago Journal & Country Rankings, https://www.scimagojr.com

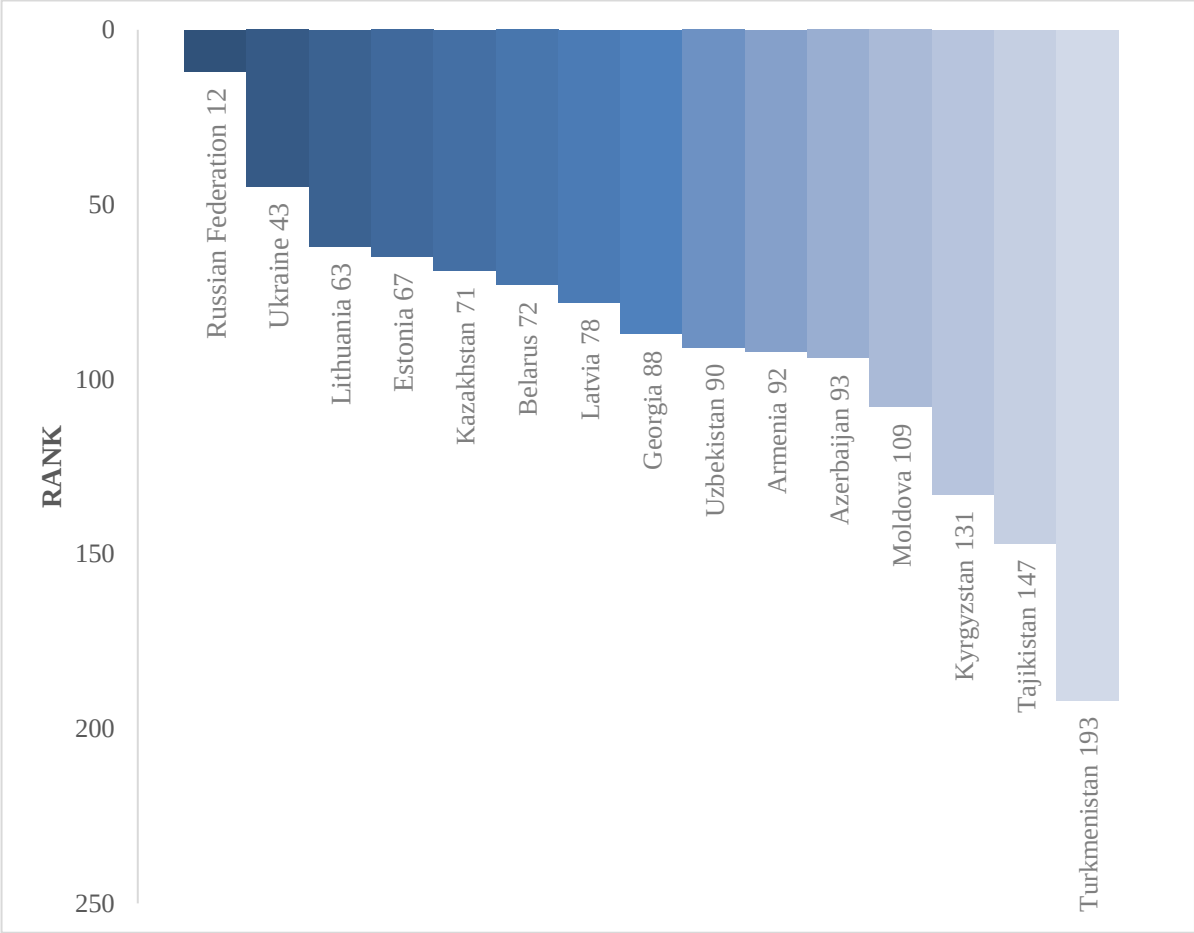
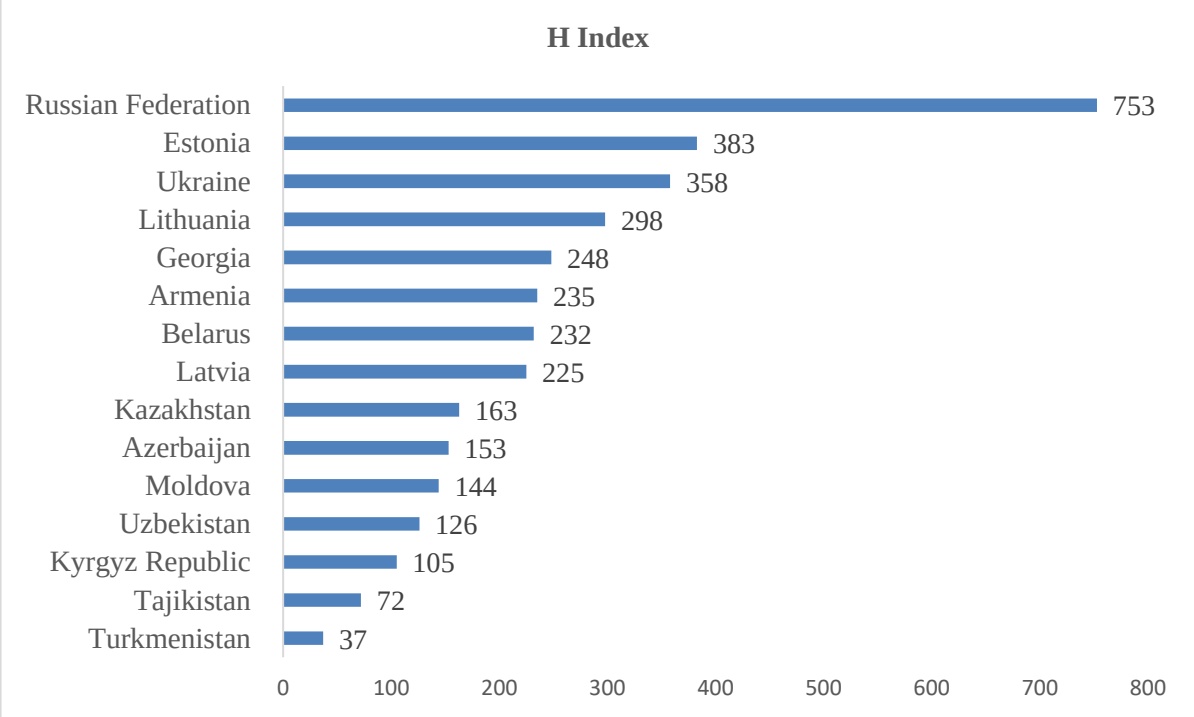


Figure 8: H-index of the Post-Soviet Countries. Source:

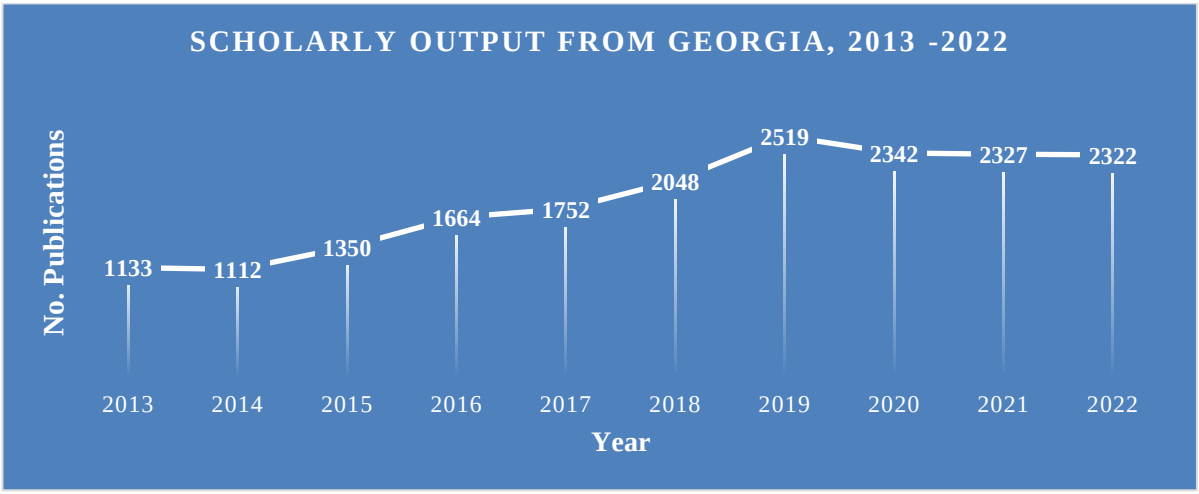
SCImago Journal & Country Rankings, May, 2024 https://www.scimagojr.com



In addition, scholarly output from Georgia in the Scopus database has been increasing annually from 2015 to 2020 (See Figure 9). One contributing factor could be the grant call conditions set by the SRNSFG, requiring at least one research article to be published in international peer-reviewed journals as the project outcome (Tabatadze & Chachkhiani, 2022).

Figure 9: Scholarly Output From Georgia, Scopus, 2013-2022.

Source: SciVal, www.scival.com.



Key findings

Research findings indicate that while research assessment is a widely discussed topic in Georgia, it is not addressed in the context of the ongoing responsible research assessment reform in Europe or the CoARA agreement. While document analysis and interview findings show some progress in this area, Georgia is still at the initial stage of responsible research assessment reform compared to developments in Europe, particularly in Austria. The research highlights a significant gap in awareness regarding responsible research assessment reform and the CoARA agreement between Georgia and Austria. This awareness deficit extends even to signatory organisations within Georgia. For example, the SRNSFG has undergone three leadership changes in the past two years, resulting in insufficient dissemination of information among its staff regarding the foundation's commitment to the agreement and its corresponding obligations. Moreover, the NCEQE lacks awareness of the CoARA agreement. In contrast, the Austrian quality assurance agency, AQ Austria, is actively monitoring the ongoing research assessment reform in Europe and is considering joining the agreement in the future. Furthermore, no information regarding the signing of the agreement can be found on the official websites of Georgian organisations, highlighting a broader communication gap in disseminating this information.

According to the study findings, the respondents view SRNSFG's endorsement of the CoARA agreement as a positive sign, anticipating that it will lead to further alignment of the Foundation's evaluation policy of grant proposals with the European standards. It is noteworthy that part of the CoARA principles are already reflected in the SRNSFG's grant evaluation criteria and the action plan, including a focus on research impact, fostering team science and collaboration, promoting open science and interdisciplinary research, supporting women scientists and young researchers, as well as fostering citizen science and supporting science popularization and communication. However, neither the official website of the SRNSFG nor its strategic documents contain explicit position regarding responsible research assessment.

Furthermore, research assessment is also mentioned in official policy documents in Georgia, such as the Government Development Strategy of Georgia - Vision 2030, and the Government Program 2021-2024: Toward Building a European State. Although not

explicitly labeled as "research assessment," it is addressed in the context of introducing performance-based funding and implementing quality assurance mechanisms for scientific research institutes. Both contexts are grounded in NPM principles, emphasizing a narrow focus on results-oriented outcomes, quality control mechanisms, and enhanced accountability, efficiency and performance.

Besides, the EC's analytical report on Georgia's application for EU membership underscores Georgia's moderate preparedness in the science and research domain and emphasizes the urgency of developing a national European Research Area roadmap, which should encompass strategies for open science initiatives and promote researchers' mobility. Implementing the CoARA principles aligns with these goals, as the CoARA agreement emphasizes open science, a critical area for development identified by the EC. Therefore, by embracing the ARRA, Georgia can not only improve its research assessment practices but also make progress towards its EU membership aspirations.

The results indicate that the challenges facing the implementation of the CoARA agreement in Georgia are multifaceted. These include existing national research assessment policies that diverge from the CoARA principles and affect institutional policies of HEIs, incomplete integration of scientific research staff within universities, resistance from senior academics, difficulties in balancing qualitative and quantitative assessment indicators, and skepticism towards the agreement's applicability, as it may introduce further ambiguity, with the ARRA being seen as more relevant for EU countries and the USA. Moreover, the scarcity of funding for scientific activities and the highly competitive environment for securing research grants pose significant obstacles. In this context, HEIs in Georgia increasingly pressure academic staff to secure external funding. Additionally, international students are highlighted as a crucial funding source for private HEIs in Georgia, significantly influencing their strategies and considerations related to global university rankings.

The study findings emphasize the crucial need for all external research evaluation organisations in Georgia, including the NCEQE, to sign the CoARA agreement, ensuring the harmonization of research assessment policies nationwide. Additionally, there is a consensus among respondents that the Ministry's active involvement is necessary for

advancing the responsible research assessment agenda in Georgia. The MoES is viewed as the cornerstone that will foster cooperation among the SRNSFG, the NCEQE, universities, research institutes and other relevant stakeholders, thereby accelerating the advancement of research assessment practices at both institutional and state levels in the country.

In contrast to Georgia, the discourse surrounding responsible research assessment and the advancement of research evaluation policies is not a recent development in Austria. However, attitudes towards the CoARA agreement vary. In particular, as per respondents, hesitation and uncertainty persist among Austrian universities regarding the agreement. This hesitation stems from a fear that the CoARA may potentially weaken the research system by introducing soft parameters and weak indicators for assessing research quality and impact. Respondents from Austria acknowledge the need to balance responsible research assessment while maintaining global competitiveness in research landscape, to ensure they remain competitive internationally. Moreover, as per respondents from Austria, the academic publication system faces significant challenges globally, including the proliferation of predatory journals, high publication fees creating disparities, and pressure on researchers to publish more. These challenges strain the peer review process and raise concerns about publication credibility and originality. Additionally, the increasing use of artificial intelligence necessitates the development of new indicators for assessment.

Furthermore, the Austrian perspective highlights several crucial factors for implementing the CoARA agreement, which are also relevant for Georgia. Particularly within HEIs, understanding institutional dynamics, embracing diverse perspectives of senior and junior researchers, recognizing and respecting disciplinary norms, career stages, and paths ensures an equitable assessment framework applicable across various academic fields and career trajectories. Furthermore, considering the skepticism towards the CoARA agreement, proactive communication with researchers and relevant stakeholders is crucial to address misconceptions or concerns about the agreement.

Conclusion

The state of research assessment in Georgia reflects a mixed landscape of progress and challenges. While discussions around research assessment are prevalent, Georgia is in the early stages of the responsible research assessment reform. Successful adaptation of the CoARA agreement in Georgia requires careful consideration and active engagement from key stakeholders. This includes the MoES, the SRNSFG, the NCEQE, the Georgian National Academy of Sciences, and higher education and research institutions. It is advisable for all external research evaluation bodies in Georgia to sign the CoARA agreement to advance responsible research assessment policies across the counrtry. Besides, the involvement of the Ministry is crucial for driving forward the responsible research assessment agenda in Georgia.

Drawing from the Austrian experience, several aspects have emerged that could inform practices in Georgia, one such aspect is the recognition of increased global competition. This recognition is equally crucial for Georgia to ensure its competitiveness while advancing research assessment policies. Signatories of the CoARA agreement from Georgia, must consider the increased global competition to ensure they remain competitive internationally. This implies not only maintaining competitiveness, but also enhancing the visibility and recognition of Georgian research on the global stage. This competition presents a huge challenge, particularly for a system that is still in its development stages.

If the performance-based funding model, currently under discussion, is introduced in Georgia, the need for responsible research assessment will become even more critical. This presents a challenge for Georgia, where the unified research performance assessment system per se, is still non-existent. Given the limited funding for research and the highly competitive environment for securing research grants, Georgian policymakers must carefully consider these factors.

Finally, the CoARA agreement goes beyond the principles of the NPM by placing significant emphasis on the societal relevance and impact of research, rather than narrowing its focus on outcome-oriented policies, performance and competition. Both the

signatories of the CoARA and Georgian policymakers should embrace this broader perspective in their approach to research assessment.

Limitations and future research

While the study primarily focuses on the management of CoARA signatory organisations, it may overlook valuable insights from academic and scientific research staff and early career researchers within these organisations. Future research should strive to incorporate perspectives from all relevant stakeholders across different fields and career stages to provide a comprehensive understanding.

Moreover, the study may not capture the full spectrum of challenges and opportunities related to CoARA implementation, as it relies on a limited set of data sources such as document analysis and interviews. Expanding data collection methods, including surveys or focus groups, could yield additional insights from a diverse range of stakeholders. Additionally, while the current study focused on the state of external research assessment policies, further research is needed to explore the state of internal research evaluation practices of HEIs and research institutions.

Lastly, it is important to note that findings from this study may not be universally applicable beyond the specific context of Georgia and its research evaluation landscape. Caution should be exercised when these findings to other regions with different institutional structures and research cultures.

Nino Gogadze is a PhD candidate at CWTS, Leiden University, and an alumna of the Erasmus Mundus joint master's degree programme Research and Innovation in Higher Education (MARIHE). She is a member of the COST Action PROFEEDBACK (Platform OF policy Evaluation community for improved EU policies and Better ACKnowledgement) working groups. Nino holds a bachelor's degree in sociology and a master's degree in education sciences from Tbilisi State University. Before joining the MARIHE programme, she worked as a research grants coordinator at the Shota Rustaveli National Science Foundation of Georgia and participated in Horizon 2020 funded projects as a researcher. Her research interests include higher education, research and innovation

policies, governance and management of higher education systems and institutions, and the Europeanization of higher education and research policies in post-Soviet countries.

References

Bregvadze, T., Medjad, K., & Bregvadze, T. (2014). *Research performance in Georgia: analysis and recommendations.* Tbilisi http://eprints.iliauni.edu.ge/1985/1/Research%20output%20snapshot%20report%20-%20Georgia%202014.pdf

Broucker, B., De Wit, K., & Verhoeven, J. C. (2017). Higher education for public value: Taking the debate beyond New Public Management. *Higher Education Research & Development*, *37*(2), 227–240. https://doi.org/10.1080/07294360.2017.1370441

Burget, M., Bardone, E., & Pedaste, M. (2017). Definitions and Conceptual Dimensions of Responsible Research and Innovation: A Literature Review. *Science and Engineering Ethics*, *23*(1), 1–19. https://doi.org/10.1007/s11948-016-9782-1

Chakhaia, L., & Bregvadze, T. (2018). Georgia: Higher Education System Dynamics and Institutional Diversity. In J. Huisman, A. Smolentseva, & I. Froumin (Eds.), *25 Years of Transformations of Higher Education Systems in Post-Soviet Countries: Reform and Continuity* (pp. 175–197). Springer International Publishing. https://doi.org/10.1007/978-3-319-52980-6_7

Chankseliani, M., (2022). *What Happened to the Soviet University?* Oxford University Press.

Chankseliani, M., Fedyukin, I., & Frumin, I. (Eds.). (2022b). *Building Research Capacity at Universities: Insights from Post-Soviet Countries*. Springer International Publishing. https://doi.org/10.1007/978-3-031-12141-8

Chankseliani, M., Lovakov, A., & Pislyakov, V. (2021). A big picture: Bibliometric study of academic publications from post-Soviet countries. *Scientometrics*, *126*(10), 8701–8730. https://doi.org/10.1007/s11192-021-04124-5

CoARA - Coalition for Advancing Research Assessment. CoARA. Retrieved May 27, 2024, from https://coara.eu/

COMMISSION RECOMMENDATION (EU) 2018/ 790—Of 25 April 2018 - On access to and preservation of scientific information. https://eur-lex.europa.eu/legal-content/EN/TXT/PDF/?uri=CELEX:32018H0790

Creswell, J. W. (2014). *Educational research: planning, conducting, and evaluating quantitative and qualitative research, 4th edition.* Edinburgh: Pearson.

Curry, S., de Rijcke, S., Hatch, A., Pillay, D. (Gansen), van der Weijden, I., & Wilsdon, J. (2022). *The changing role of funders in responsible research assessment: Progress, obstacles and the way ahead (RoRI Working Paper No.3)* [Report]. Research on Research Institute. https://doi.org/10.6084/m9.figshare.13227914.v2

de Boer, H., Enders, J., & Schimank, U. (2007). On the Way towards New Public Management? The Governance of University Systems in England, the Netherlands, Austria, and Germany. In D. Jansen (Ed.), *New Forms of Governance in Research Organizations: Disciplinary Approaches, Interfaces and Integration* (pp. 137–152). Springer Netherlands. https://doi.org/10.1007/978-1-4020-5831-8_5

Dzotsenidze, N. (2022). Barriers to completion of PhD studies in Georgia. [Policy Paper]. Policy and Management Consulting Group (PMCG). Tbilisi, Georgia. https://www.pmcresearch.org/policypapers_file/031f624da848cd864.pdf

European Commission. Directorate-General for Research and Innovation. (2010). *Assessing Europe's university-based research: Expert group on assessment of university-based research*. Publications Office of the European Union. https://data.europa.eu/doi/10.2777/80193

European Commission. Directorate General for Research and Innovation. (2017). *Specific support to Georgia: Horizon 2020 Policy Support Facility: background report.* Publications Office. https://data.europa.eu/doi/10.2777/200310

European Commission. Directorate General for Research and Innovation. (2018). *Specific support to Georgia: Improving the effectiveness of Georgia's research and innovation system through prioritisation, selectivity of funding and science business links.* Publications Office. https://data.europa.eu/doi/10.2777/446285

European Commission. Directorate-General for Research and Innovation. (2021). *Towards a reform of the research assessment system: Scoping report*. Publications Office of the European Union. https://data.europa.eu/doi/10.2777/707440

European Commission. Directorate General for Research and Innovation. (2022). *European Research Area policy agenda: Overview of actions for the period 2022 2024.* Publications Office. https://data.europa.eu/doi/10.2777/52110

European Research Executive Agency (European Commission), Oancea, A., & Wilson, S. (2024). *Report on research assessment*. Publications Office of the European Union. https://data.europa.eu/doi/10.2848/931335

European Commission. Web site (2024, May 15). Retrived from: https://neighbourhood-enlargement.ec.europa.eu/european-neighbourhood-policy/countries-region/georgia_en

Government of Georgia. web site https://www.gov.ge/

Global Research Council (GRC). (2021). Responsible Research Assessment (Conference Report). https://globalresearchcouncil.org/fileadmin/documents/GRC_Publications/GRC_RRA_Conference_Summary_Report.pdf

Hammarfelt, B., & Hallonsten, O. (2022). Are evaluative bibliometrics neoliberal? A historical and theoretical problematization. *Social Science Information*, 414-438. https://doi.org/10.1177/05390184231158195

Huisman, J., Smolentseva, A., & Froumin, I. (Eds.). (2018). *25 Years of Transformations of Higher Education Systems in Post-Soviet Countries: Reform and Continuity*. Springer International Publishing. https://doi.org/10.1007/978-3-319-52980-6

Jibladze, E. (2017). Reforms for the External Legitimacy in the Post Rose Revolution Georgia. Case of University Autonomy. *HERJ Hungarian Educational Research Journal*, *7*(1), 7–27.

Jibladze, E., & Glonti, L. (2020). Higher Education Systems and Institutions, Georgia. In P. N. Teixeira & J. C. Shin (Eds.), *The International Encyclopedia of Higher Education Systems and Institutions* (pp. 1055–1063). Springer Netherlands. https://doi.org/10.1007/978-94-017-8905-9_393

Kobakhidze, M. N., & Samniashvili, L. (2022a). "Less USSR, more democracy please!": Hope and discontent in Georgia's quest for academic freedom. *Higher Education Quarterly*, *76*(3), 595–611. https://doi.org/10.1111/hequ.12382

Legislative Herald of Georgia. Web site http://matsne.gov.ge/

Lovakov, A., Chankseliani, M., & Panova, A. (2022). Universities vs. research institutes? Overcoming the Soviet legacy of higher education and research. *Scientometrics*, *127*(11), 6293–6313. https://doi.org/10.1007/s11192-022-04527-y

Macharashvili, L., & Gogadze, N. (2023). The many faces of research assessment: Case of independent Georgia. *Journal of Research and Innovation in Higher Education*, *4*(1), 1–27. Retrieved from: https://rihe-journal.com/index.php/rihe/article/view/31

Ministry of Education and Science of Georgia (MoES). Web site https://mes.gov.ge/

Moore, M.H. (1995) Creating Public Value: Strategic Management in Government. Harvard University Press, London.

National Center for Educational Quality Enhancement (NCEQE). Web site https://eqe.ge/

National Statistics Office of Georgia, https://www.geostat.ge/en

Owen, R., Macnaghten, P., & Stilgoe, J. (2012). Responsible research and innovation: From science in society to science for society, with society. *Science and Public Policy*, *39*(6), 751–760. https://doi.org/10.1093/scipol/scs093

SCImago Journal & Country Rankings (SJR) - *International Science Ranking*. Retrieved from https://www.scimagojr.com/countryrank.php

SciVal. Elsevier. (2024) https://www.scival.com/home

Seawright, J., & Gerring, J. (2008). Case Selection Techniques in Case Study Research: A Menu of Qualitative and Quantitative Options. *Political Research Quarterly*, *61*(2), 294-308. https://doi.org/10.1177/1065912907313077

Shota Rustaveli National Science Foundation of Georgia (SRNSFG). Web site https://rustaveli.org.ge/eng

Sporn, B. (2003). *Convergence of Divergence in International Higher Education Policy: Lessons from Europe*, Publications from the Forum for the Future of Higher Education.

State Audit Office of Georgia. (2014). *მეცნიერების მართვის ღონისძიებების ეფექტიანობის აუდიტის ანგარიში [The efficiency report of the science management system]*. Tbilisi. Retrieved from: https://sao.ge/files/auditi/efeqtianobis-angarishi/2014/mecniereba.pdf

Tabatadze, S., & Chachkhiani, K. (2022b). University-Based Research and Development in Georgia. In M. Chankseliani, I. Fedyukin, & I. Frumin (Eds.), *Building Research Capacity at Universities: Insights from Post-Soviet Countries* (pp. 201–221). Springer International Publishing. https://doi.org/10.1007/978-3-031-12141-8_11

The World Bank. Databank. (2024). https://databank.worldbank.org/

The World Bank. (2018). Technical Assistance to Support Reforms to the Higher Education Financing System in Georgia (P164779). https://documents1.worldbank.org/curated/en/895021551184190719/pdf/Report-on-Georgia-Higher-Education-Funding-Reform.pdf

Tsotniashvili, K. (2023). *Transformation of Academic Identities in Georgia: Diffractive Narratives In-Between Defuturing and Refuturing*, Dissertation/Thesis. Arizona State University.

UNESCO Institute of Statistics. https://uis.unesco.org/