



NATIONAL RESEARCH
UNIVERSITY



A Big Picture: Bibliometric Study of Academic Publications from Post-Soviet Countries

Maia Chankseliani (Oxford, UK)

Andrey Lovakov (HSE, Russia)

Vladimir Pislyakov (HSE, Russia)

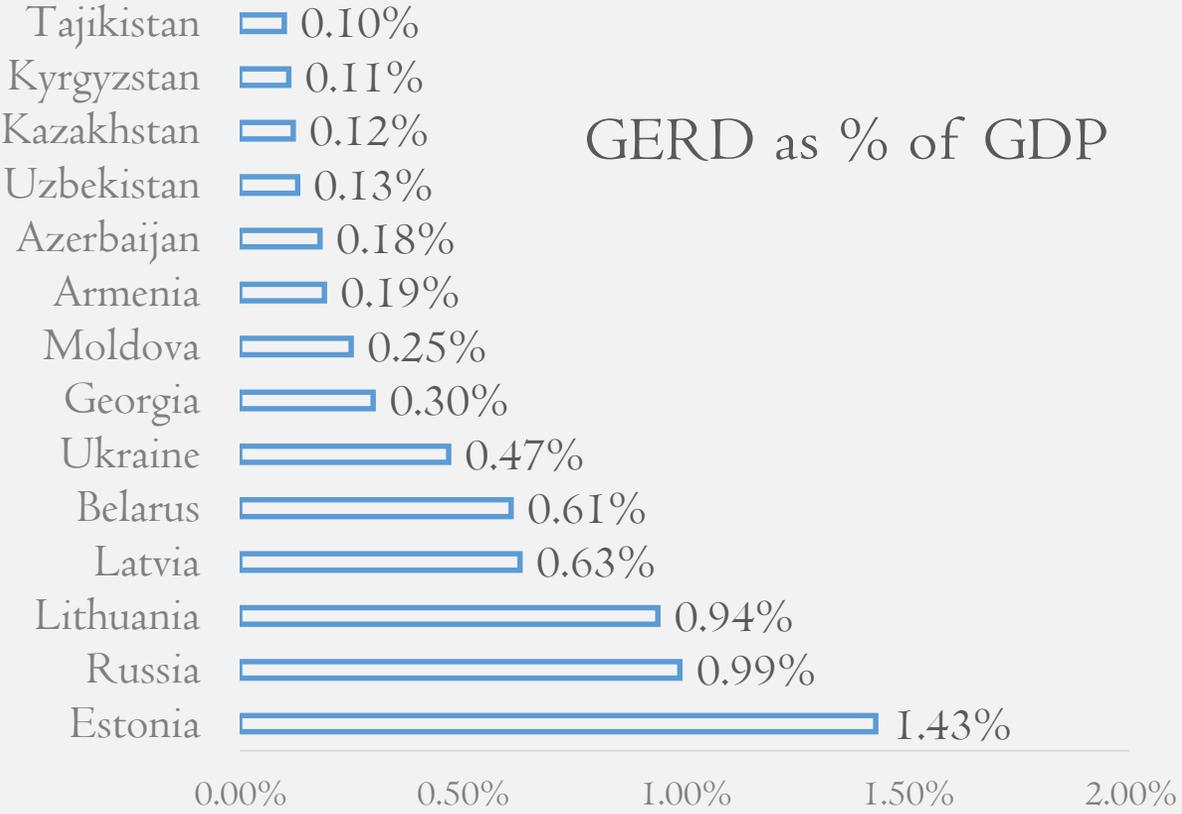
CGHE webinar

29 October, 2020

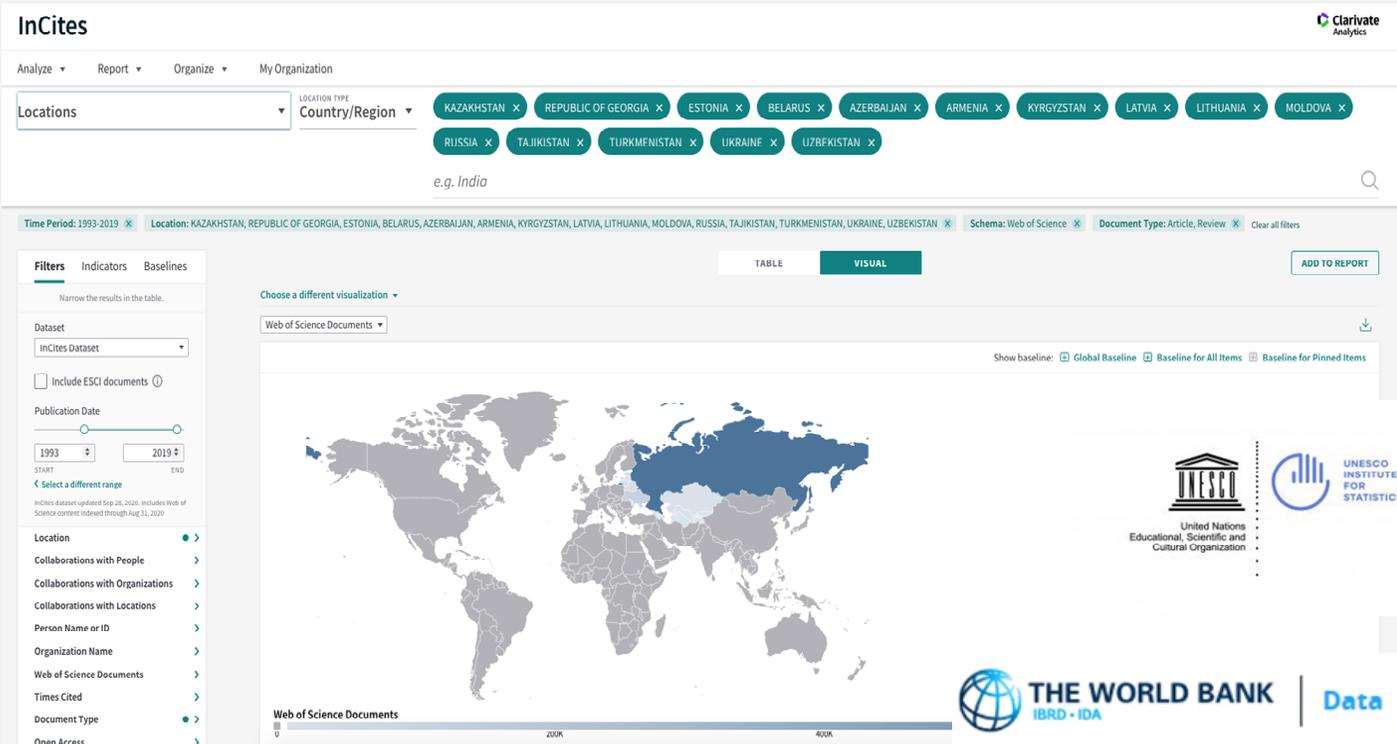
The Soviet Science: Common Characteristics



R&D investments do not match Global Aspirations



Data and Method



The areas of study – follows the OECD subject structure:

- Natural Sciences
- Engineering & Technology
- Medical & Health Sciences
- Agricultural Sciences
- Social Sciences
- Humanities

Publications indexed in:

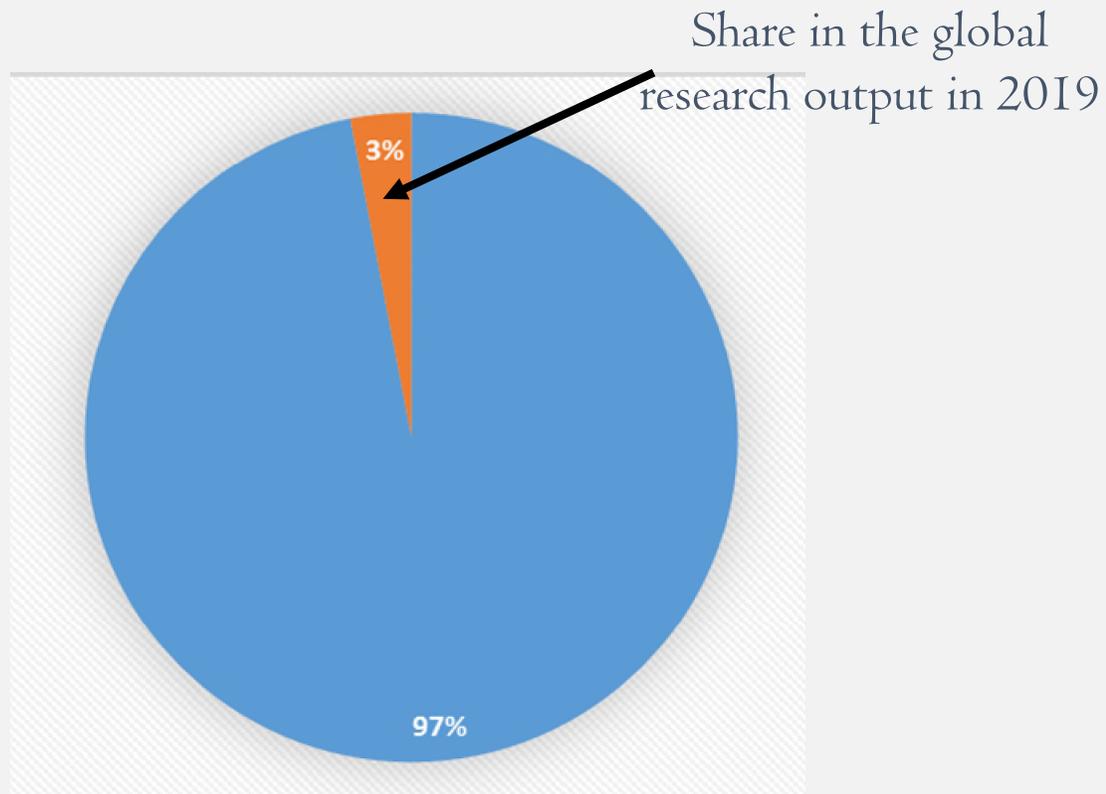
- Science Citation Index Expanded (SCI-EXPANDED)
- Social Sciences Citation Index (SSCI)
- Arts & Humanities Citation Index (A&HCI)

Document types: Articles and Reviews

Years of publication: 1993-2019

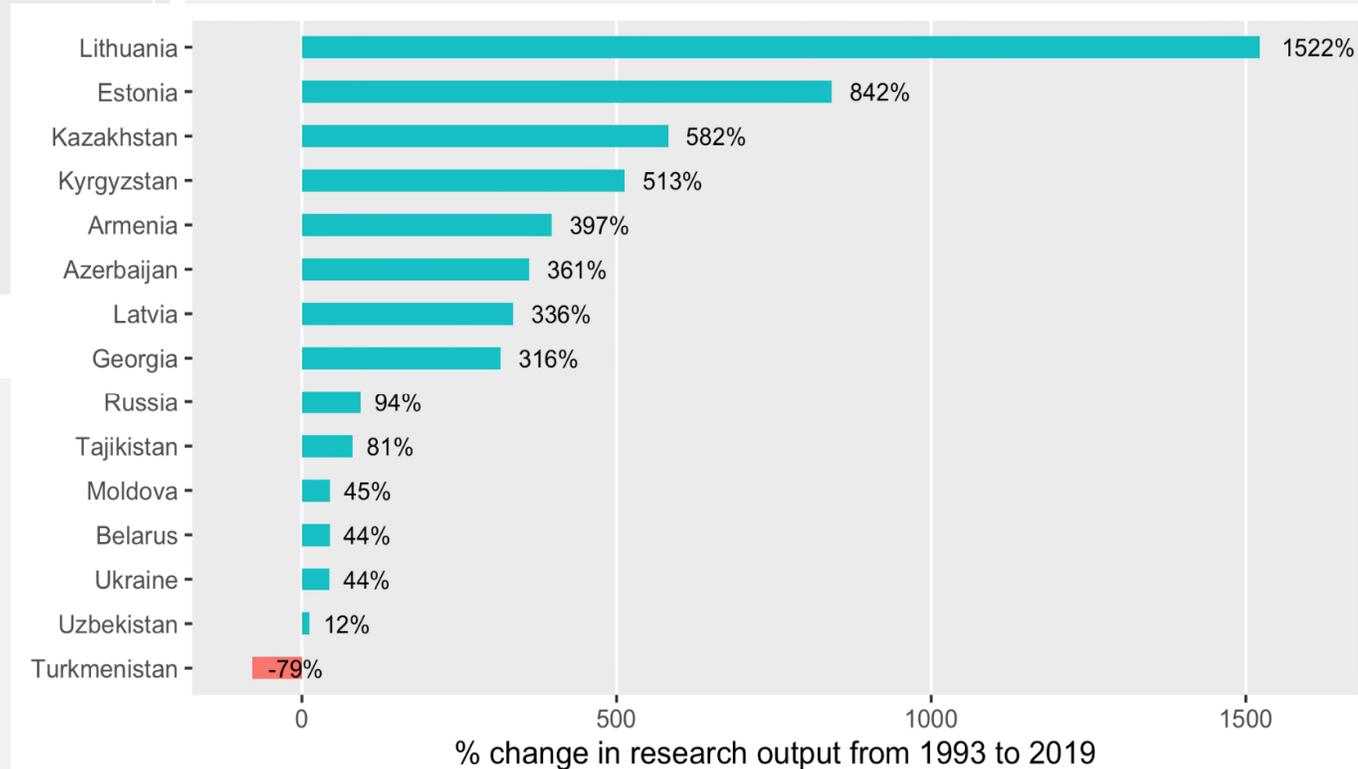
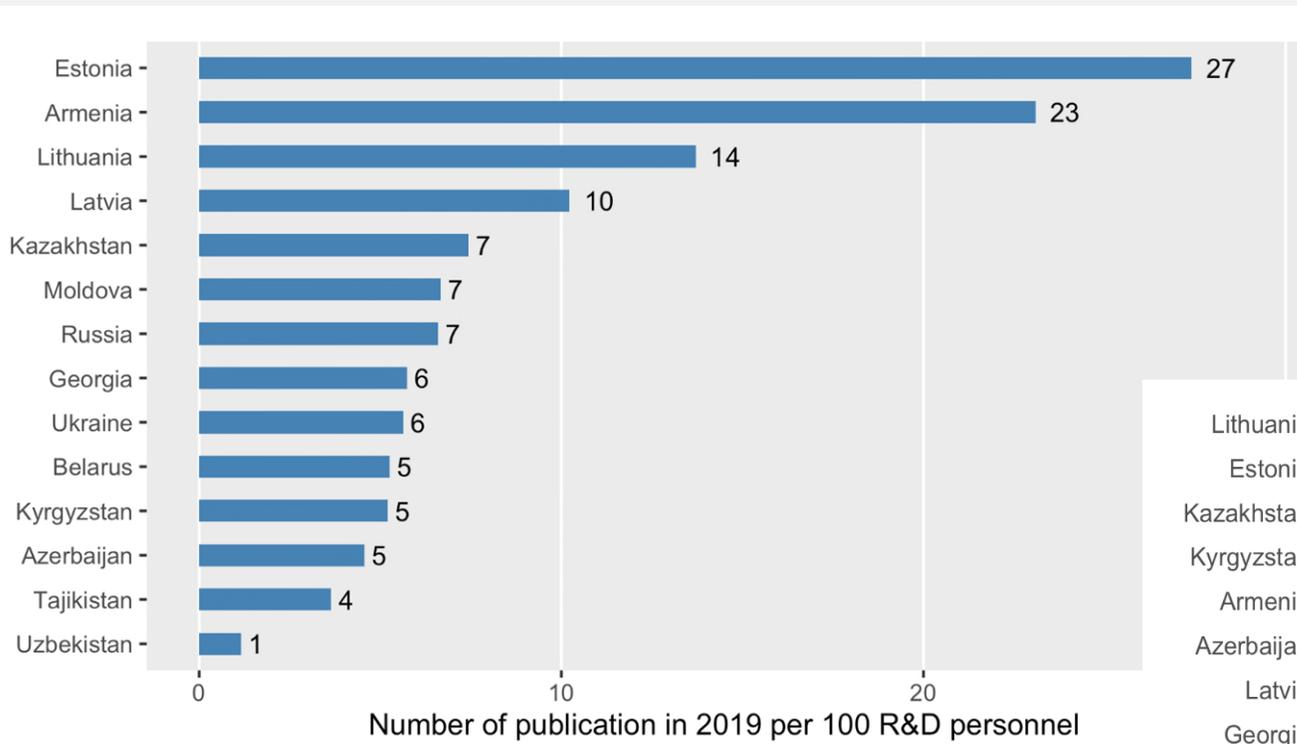
Sample size: 1,100,775





Country	Number of publications (1993-2019)
Armenia	14150
Azerbaijan	9658
Belarus	30048
Estonia	31791
Georgia	11267
Kazakhstan	12027
Kyrgyzstan	1948
Latvia	13901
Lithuania	38281
Moldova	6005
Russia	800135
Tajikistan	1500
Turkmenistan	290
Ukraine	120701
Uzbekistan	9073

Quantity of Research Output

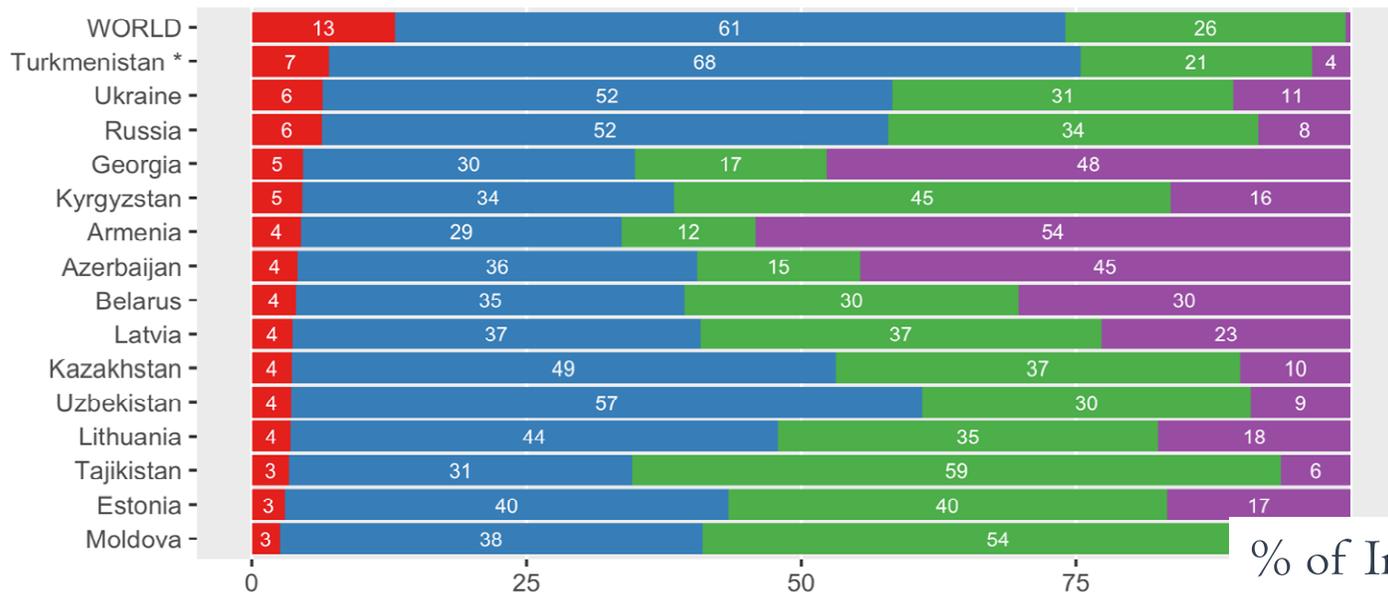


Distribution (%) of Publications by the Area of Study (1998, 2010, 2019)



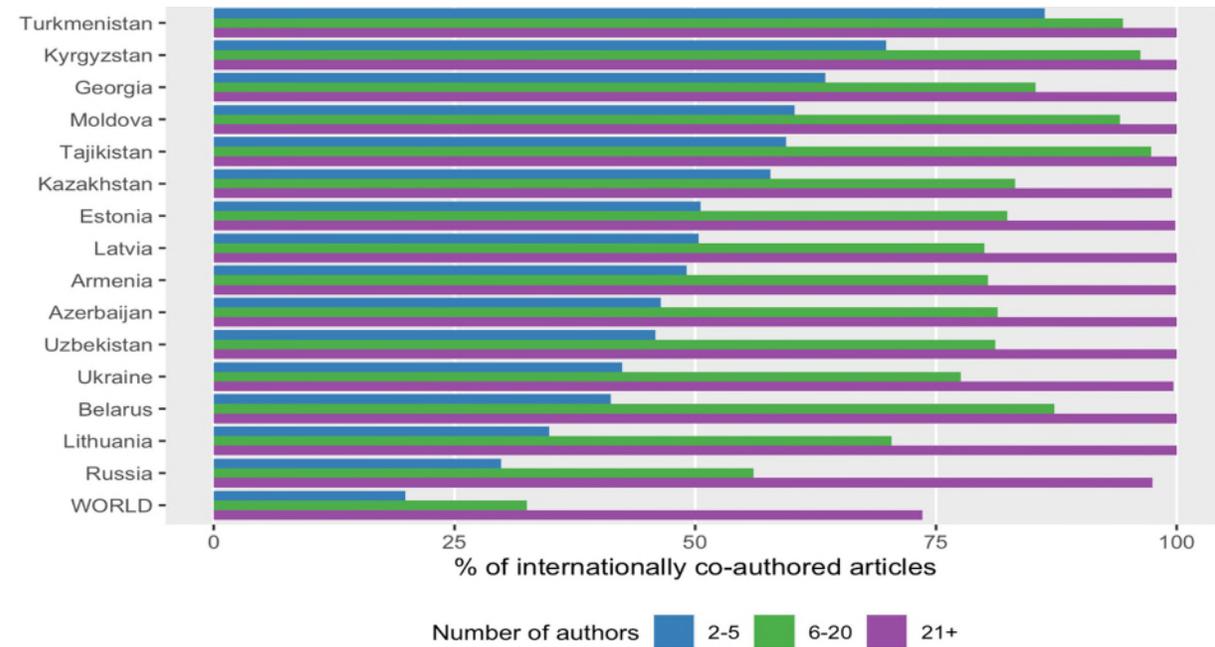
Natural Sciences (NS)
 Engineering & Technology (E&T)
 Medical & Health Sciences (M&HS)
 Agricultural Sciences (AS)
 Social Sciences (SS)
 Humanities (H)

% of Publications with Different Numbers of Authors (1993-2019)



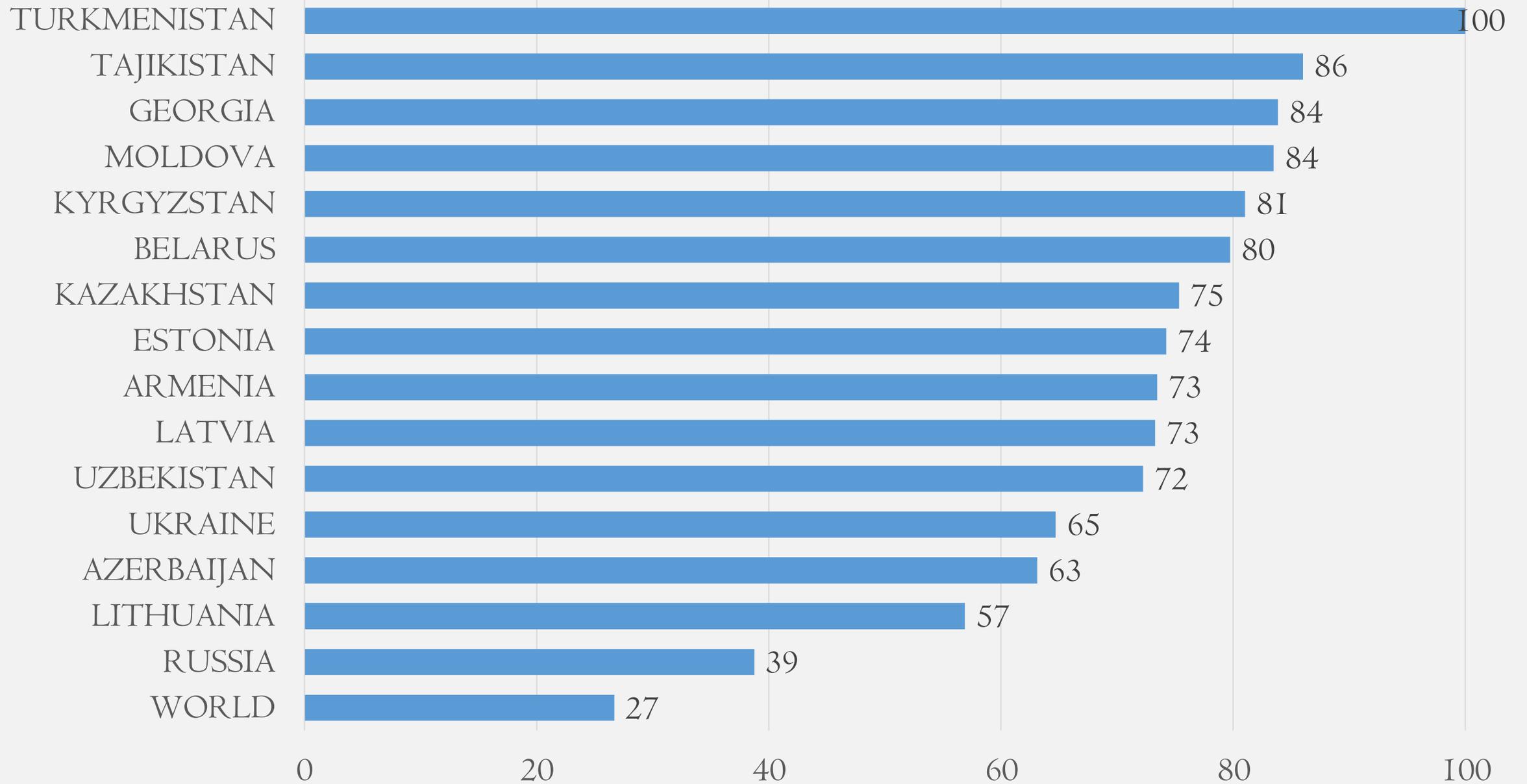
Number of authors: 1 (red), 2-5 (blue), 6-20 (green), 21+ (purple)

% of Internationally Co-Authored Publications with Different Numbers of Authors (1993-2019)

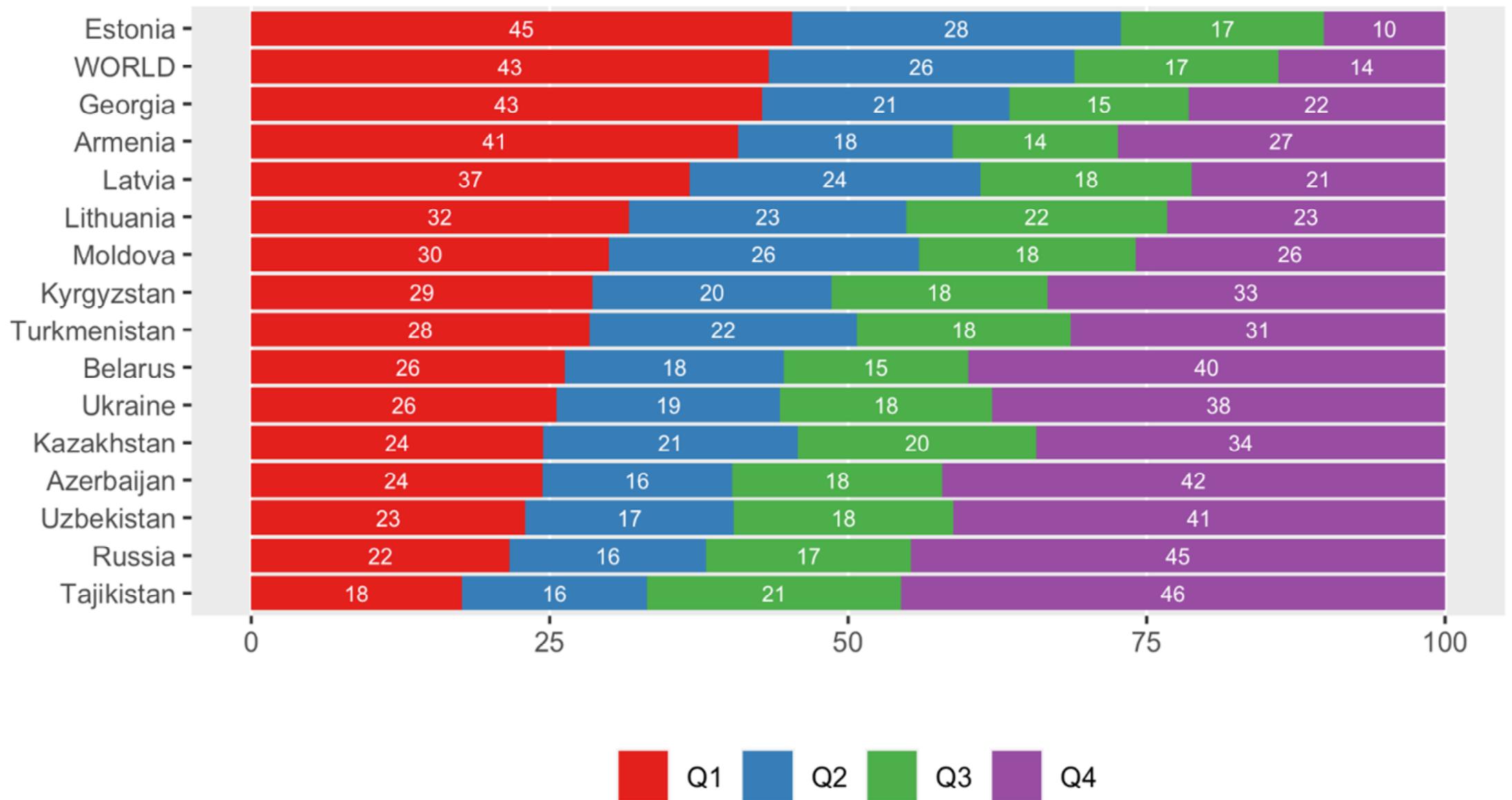


Number of authors: 2-5 (blue), 6-20 (green), 21+ (purple)

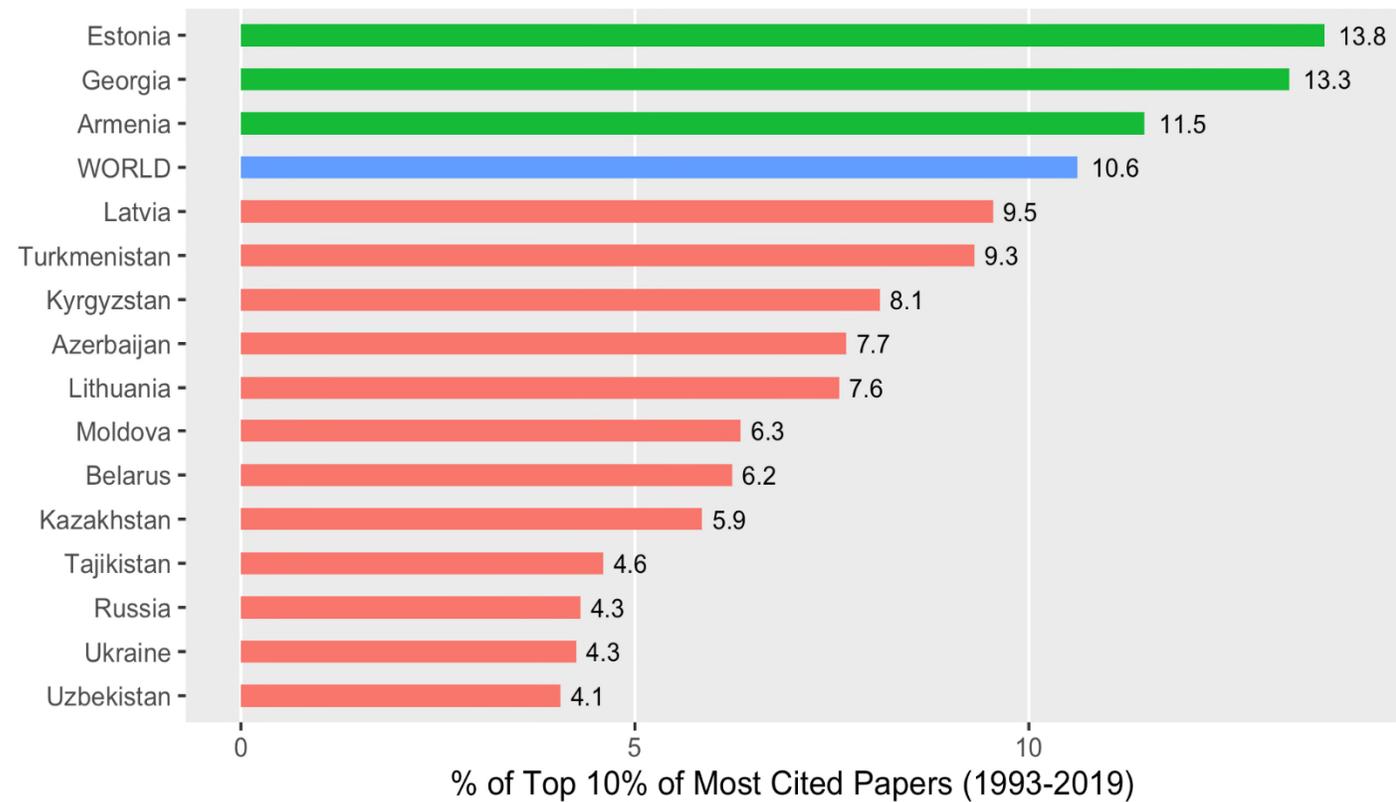
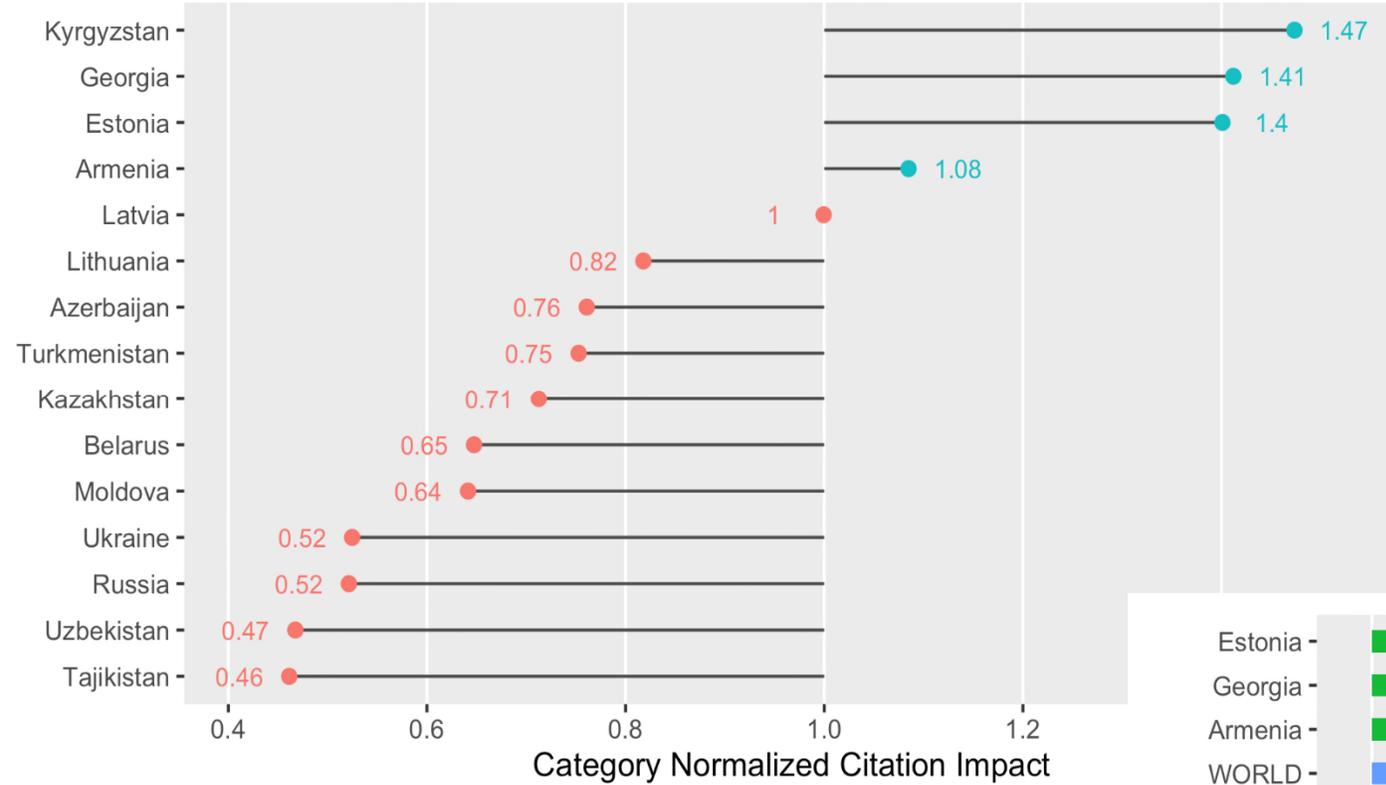
Internationally Co-authored Publications (2019)



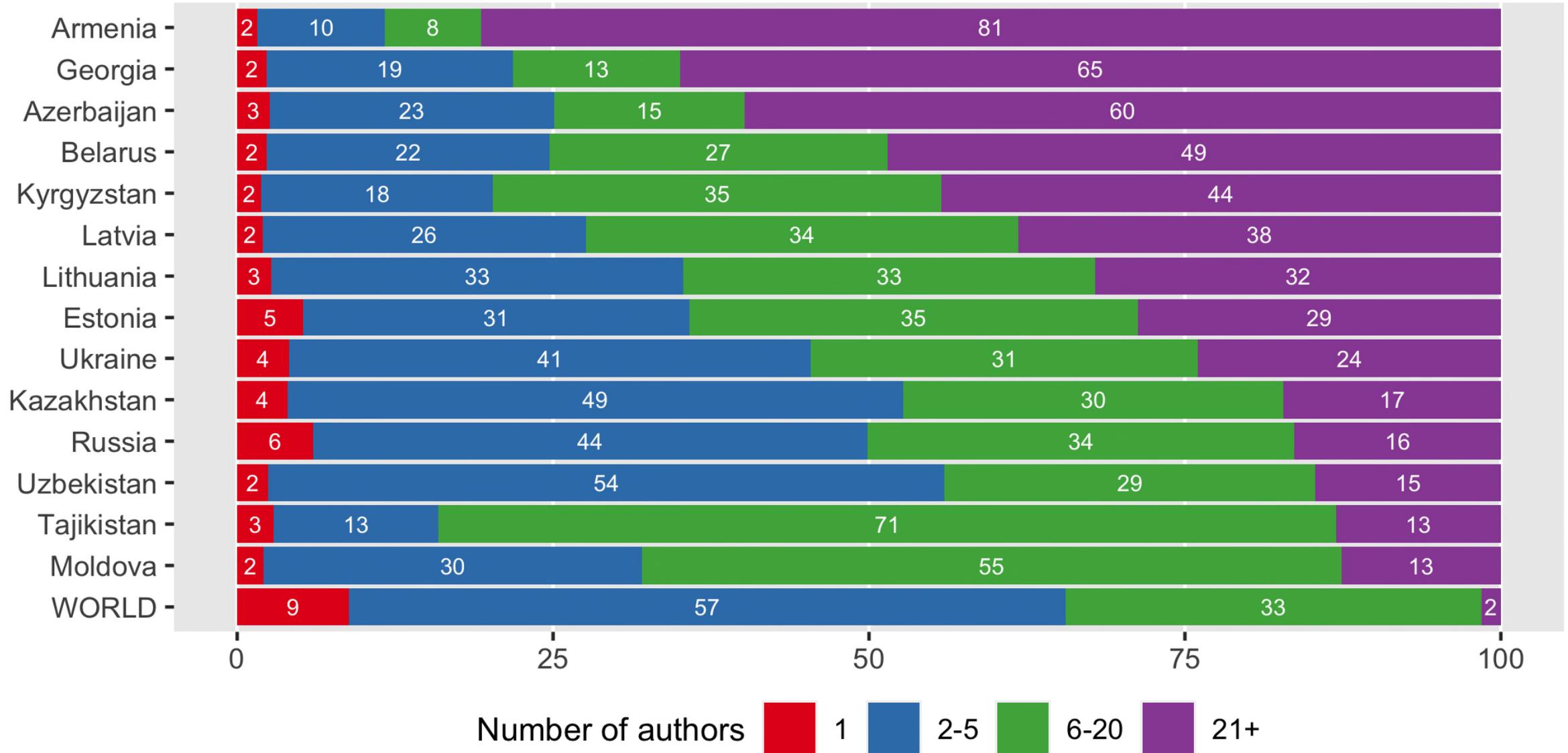
Quality of Journals



Impact of Research Output

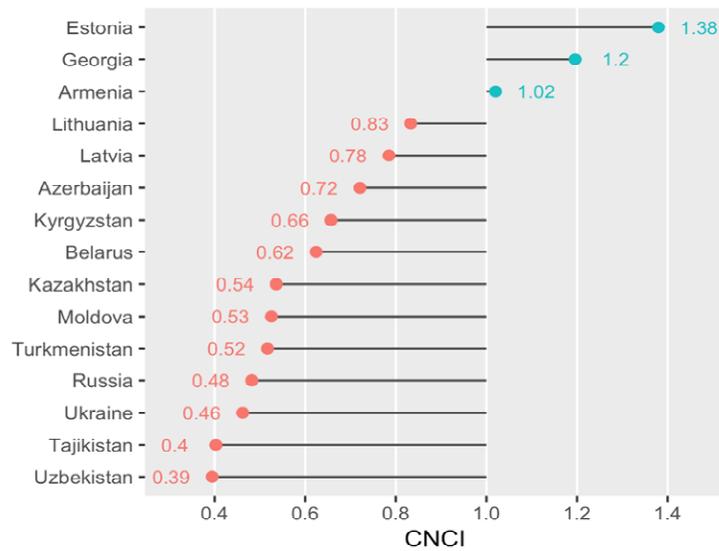


Proportion of Top10% of Most Cited Publications, by the Number of Authors (1993-2019)

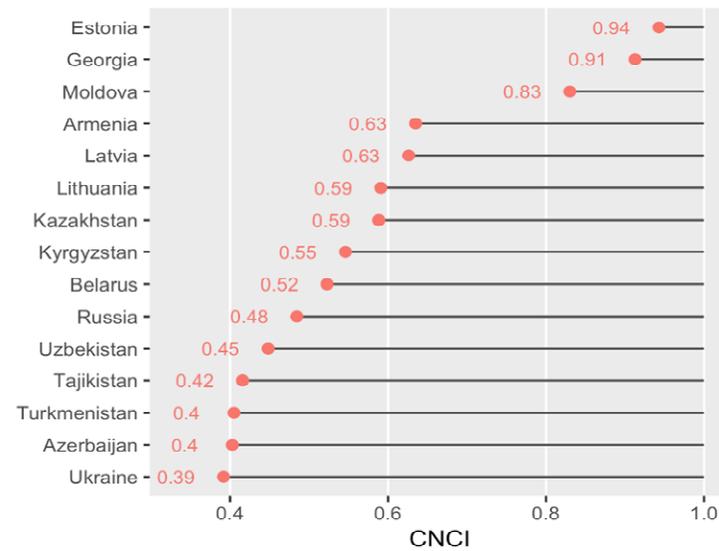


CNCI by Area of Study (1993-2019)

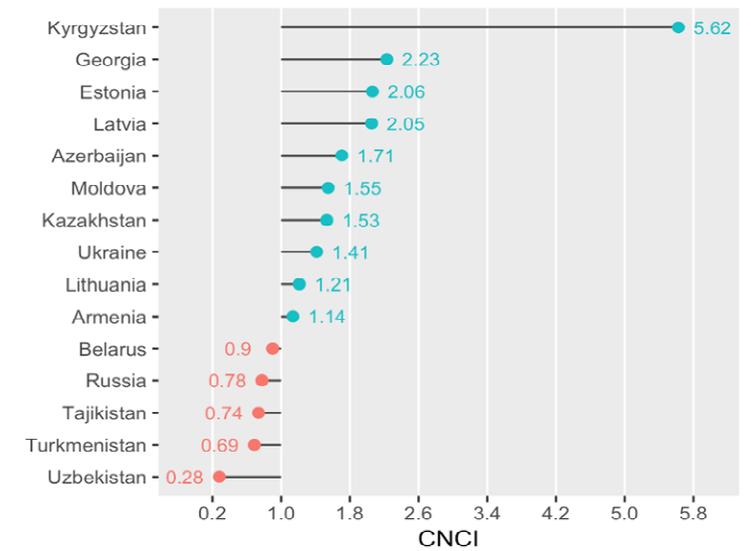
Natural sciences



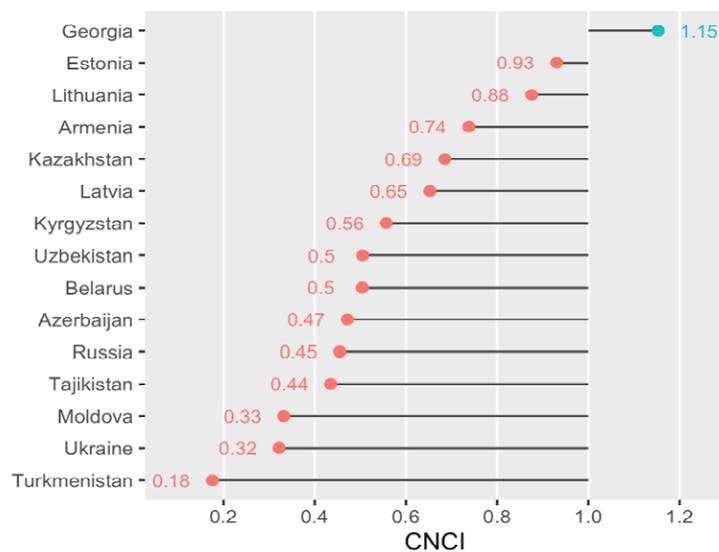
Engineering and technology



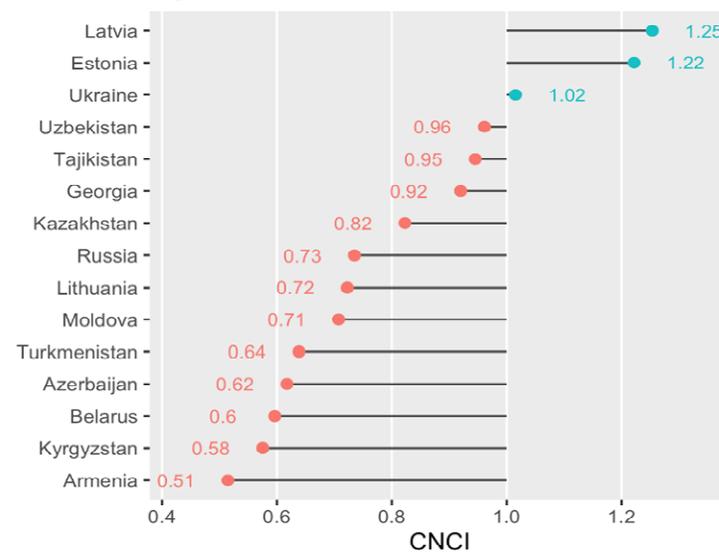
Medical and health sciences



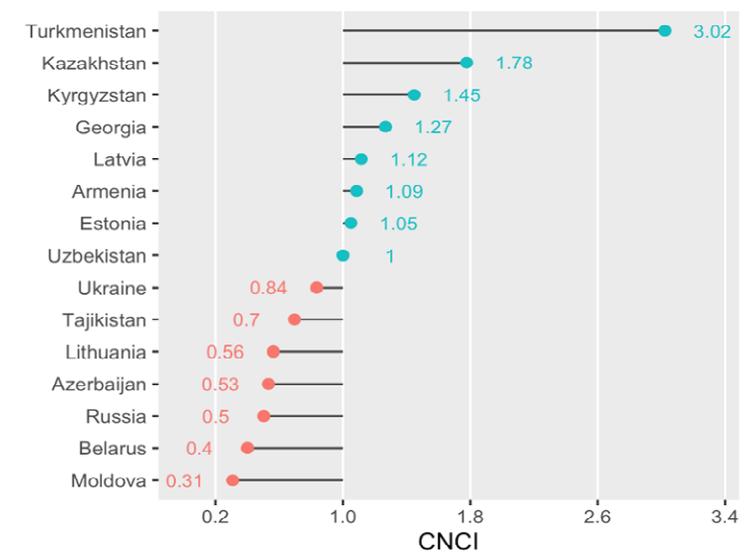
Social sciences



Agricultural sciences



Humanities



Large variations in terms of the global knowledge production

Post-Soviet countries not key players in the global research scene

Researchers tapping into international collaborative networks actively

Concluding thoughts

The need to take a closer look at the national policies, institutional practices, and the individual expertise, motivation, and opportunity

Large variations in terms of the R&D funding

Universities becoming key producers of global knowledge in selected countries

Links between the spending and research output

Email:

maia.chankseliani@education.ox.ac.uk

lovakov@hse.ru

pislyakov@hse.ru

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