

The international conference on
Internationalisation and Innovation in Higher Education
October 11, 2018

Research and Development reform: the case of Kazakhstan and Uzbekistan

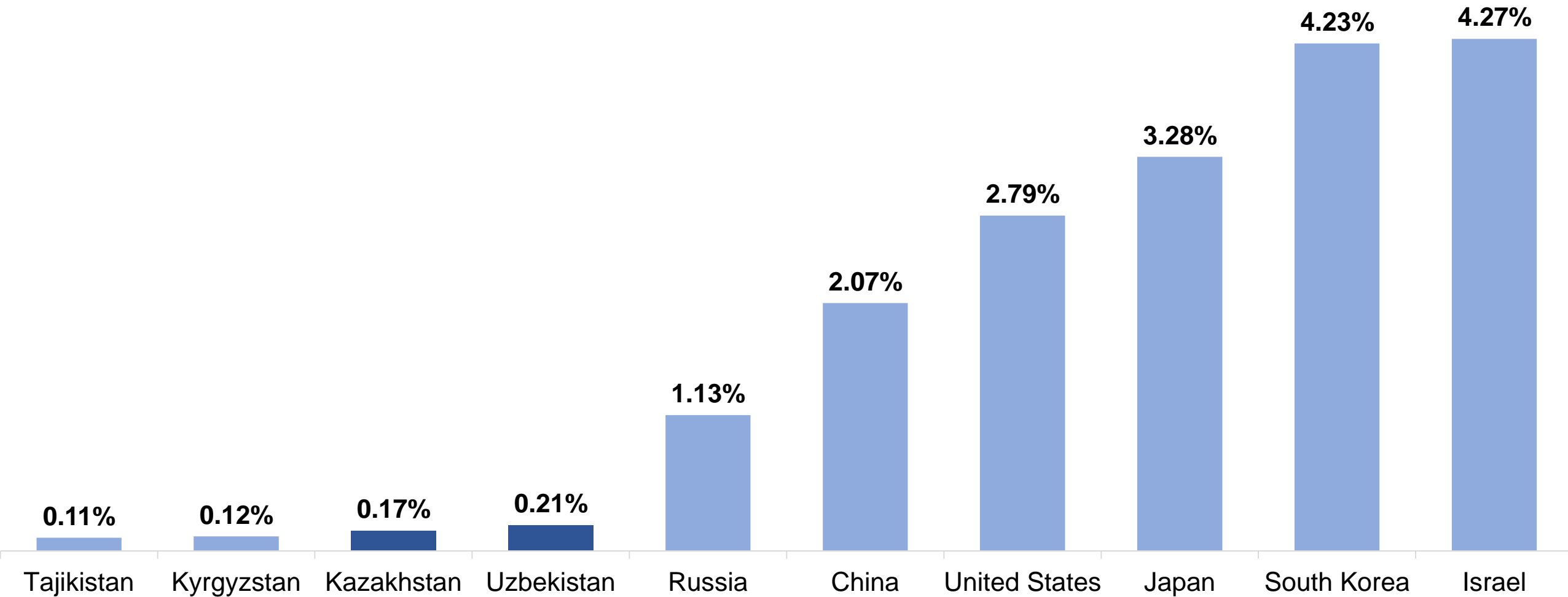
Presented by
Alisher Suyunov

Research and Development (R&D)

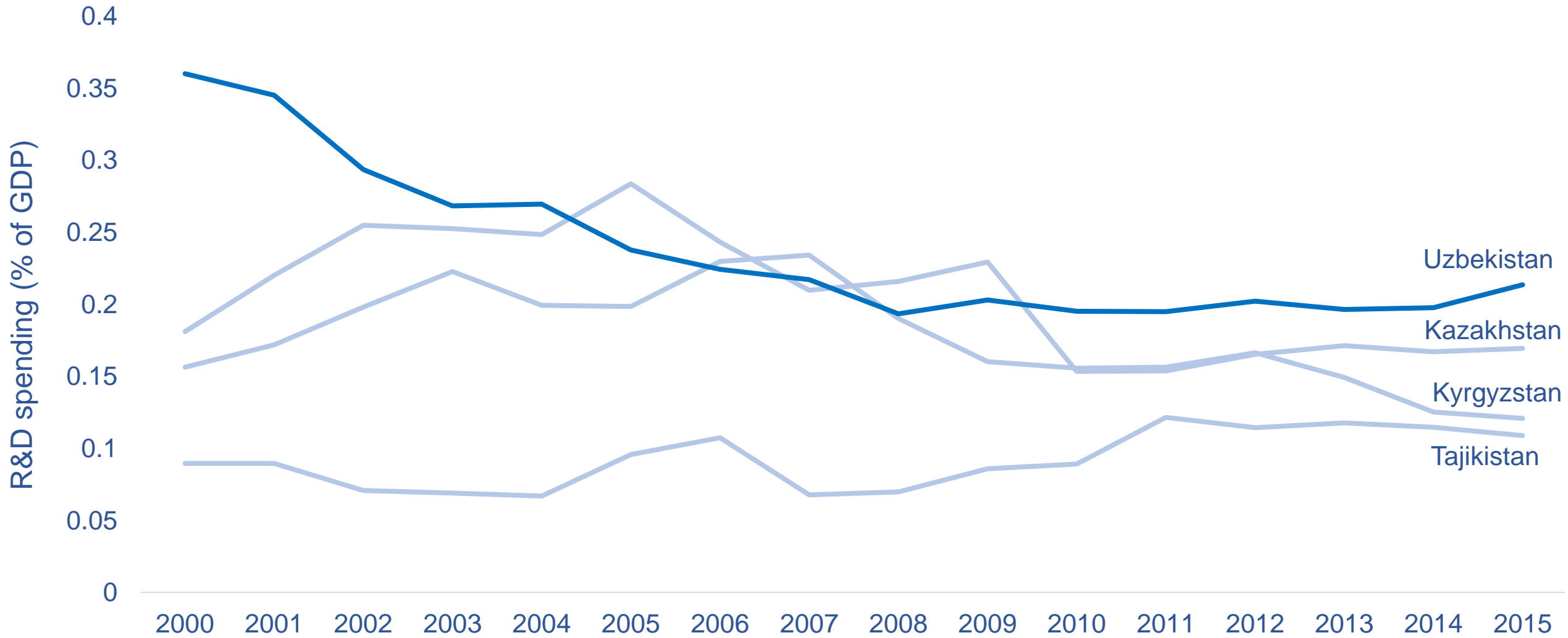
Research and development is **systematic** and **creative activities** to **contribute** to knowledge stock and **find new uses** for existing knowledge; these activities are required to be **novel**, **creative**, **uncertain**, and **reproducible** (OECD, 2015)



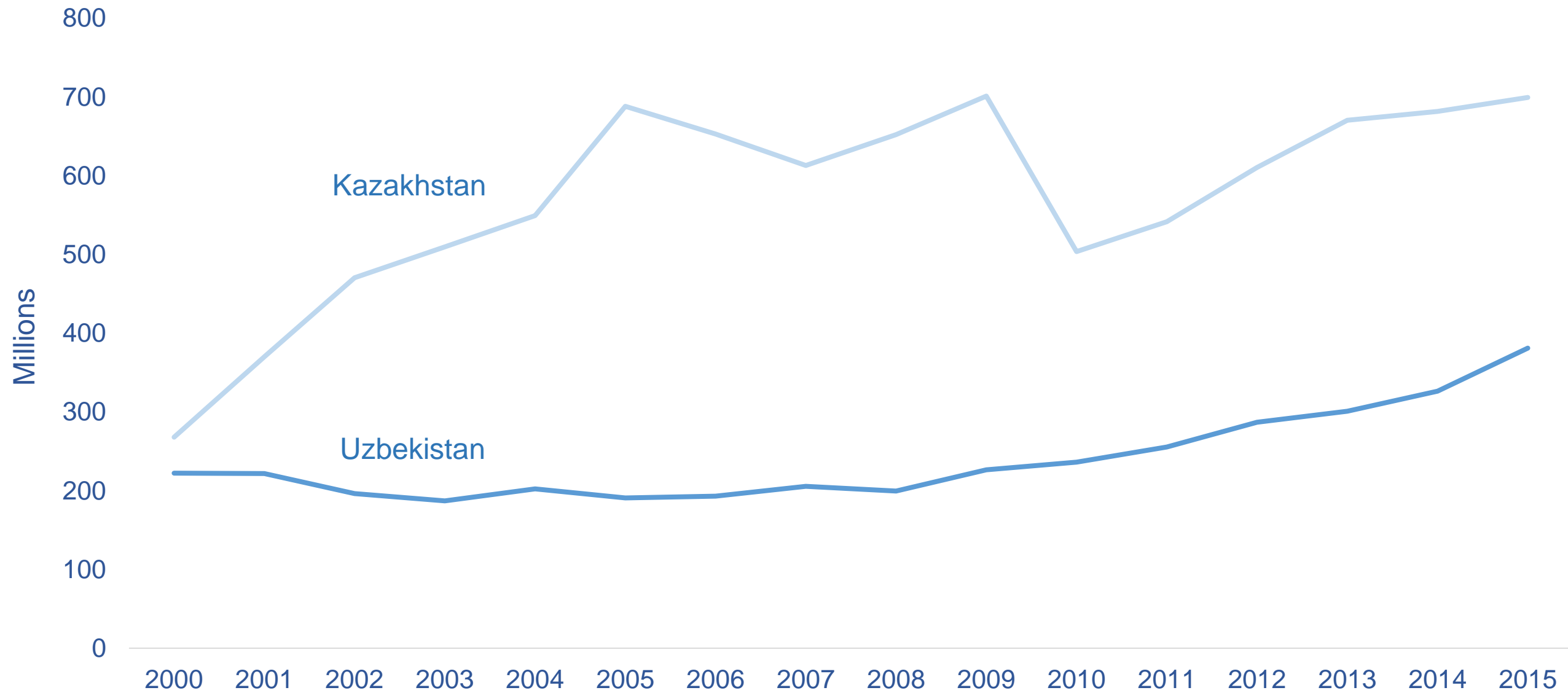
R&D expenditure (% of GDP) in 2015



Gross Expenditure on R&D in Central Asia

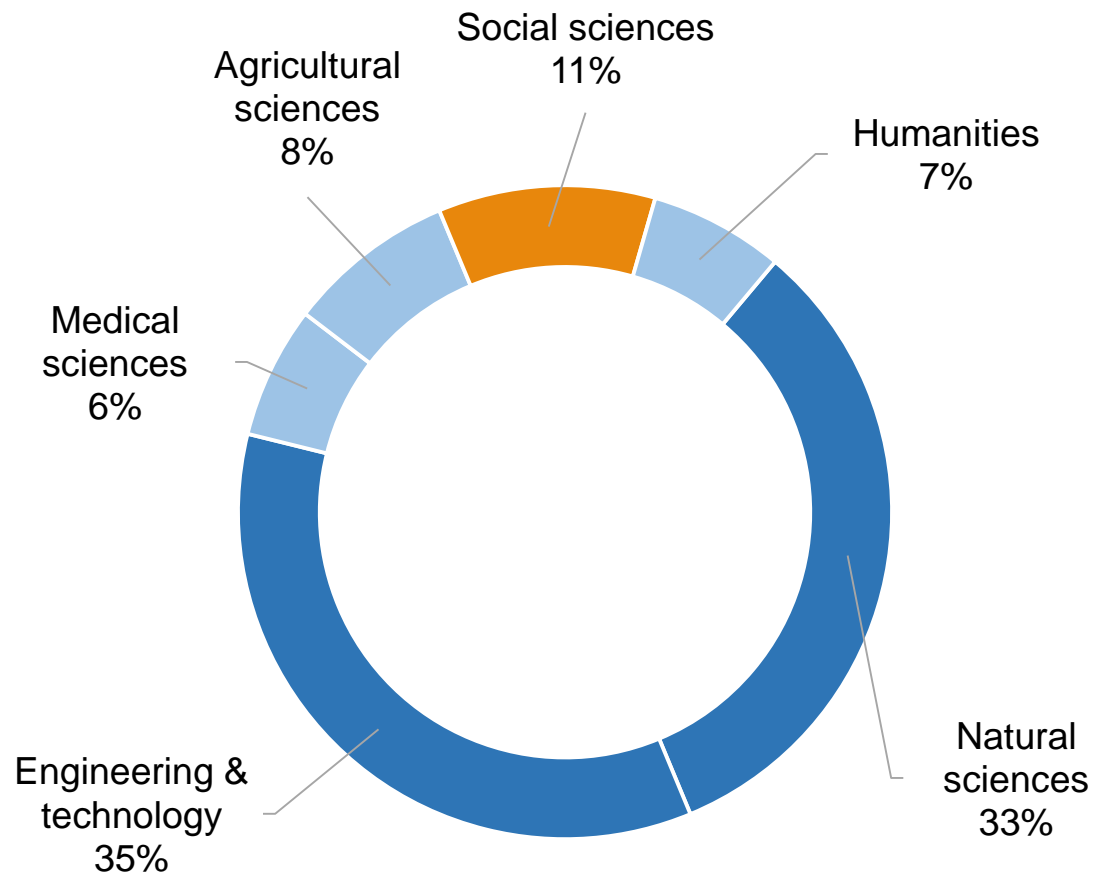


R&D expenditure (in 2011 PPP dollars)

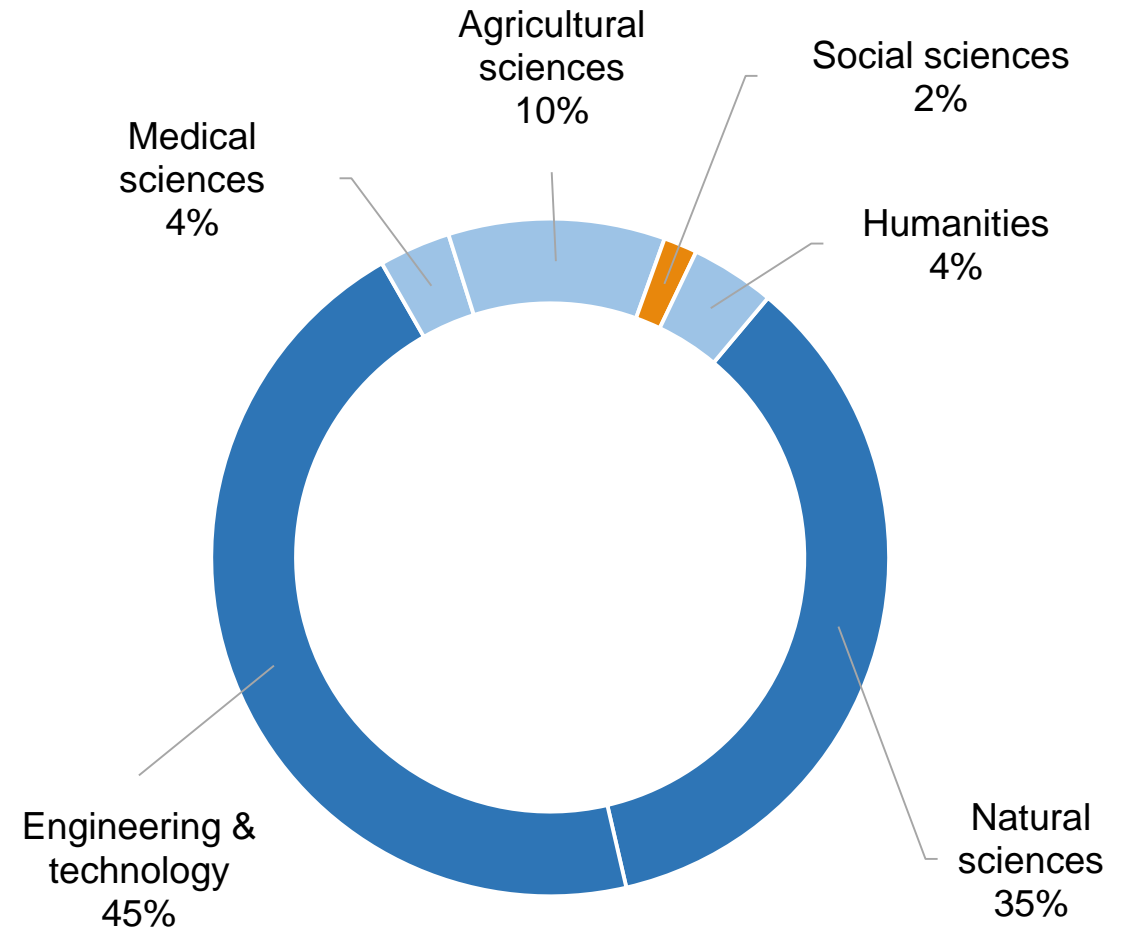


R&D expenditure by sciences (2016)

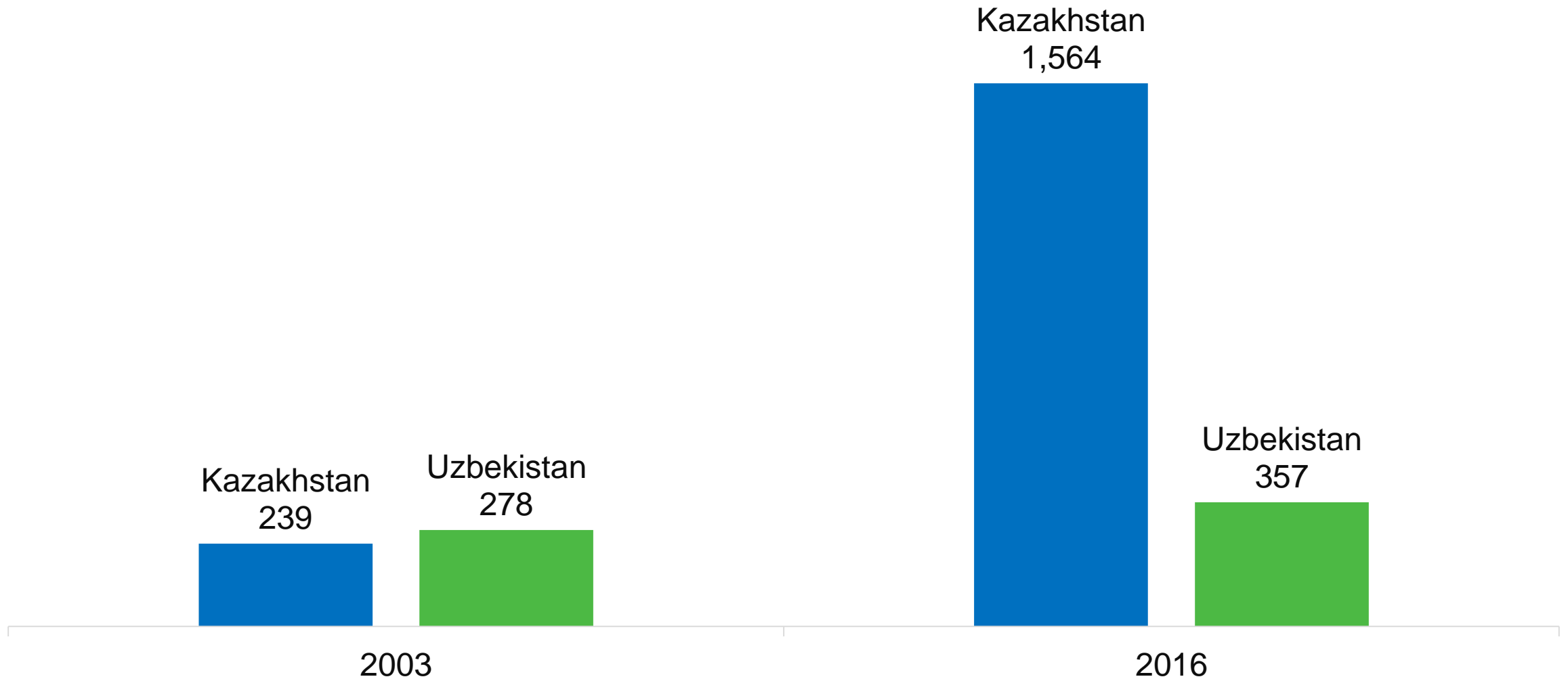
Uzbekistan



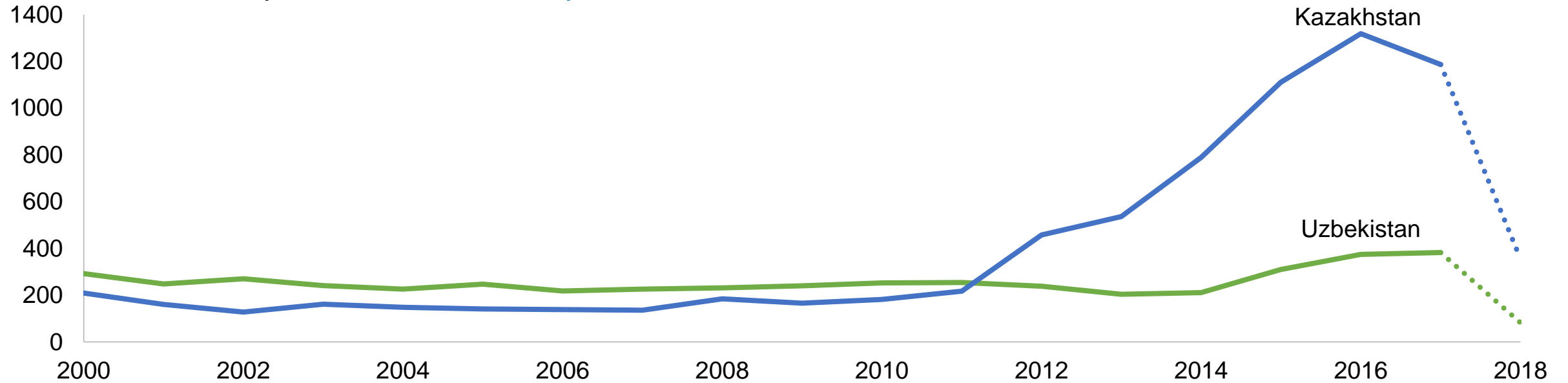
Kazakhstan



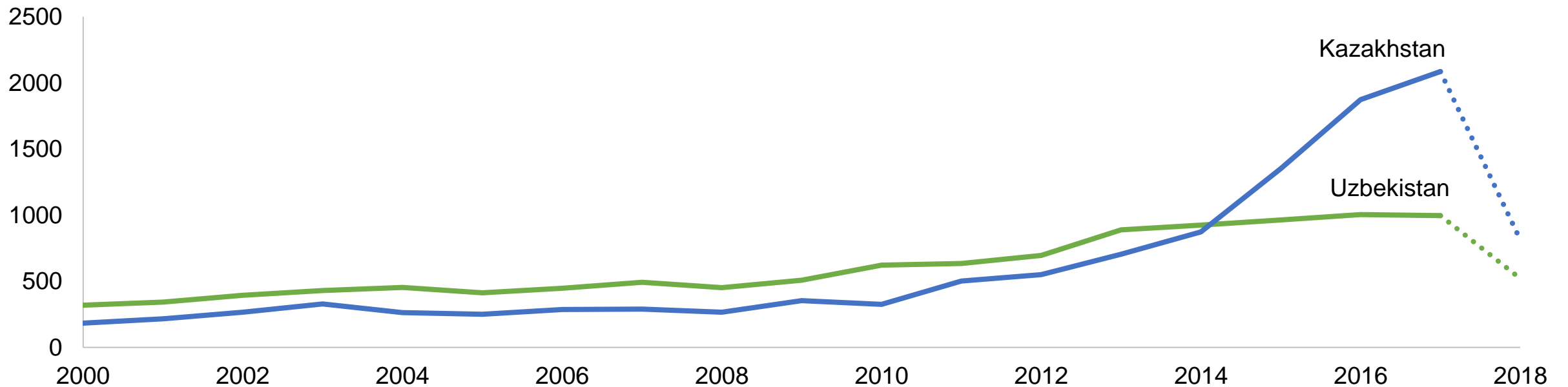
Number of technical & scientific journal articles in Kazakhstan six-folded over 2003–2016



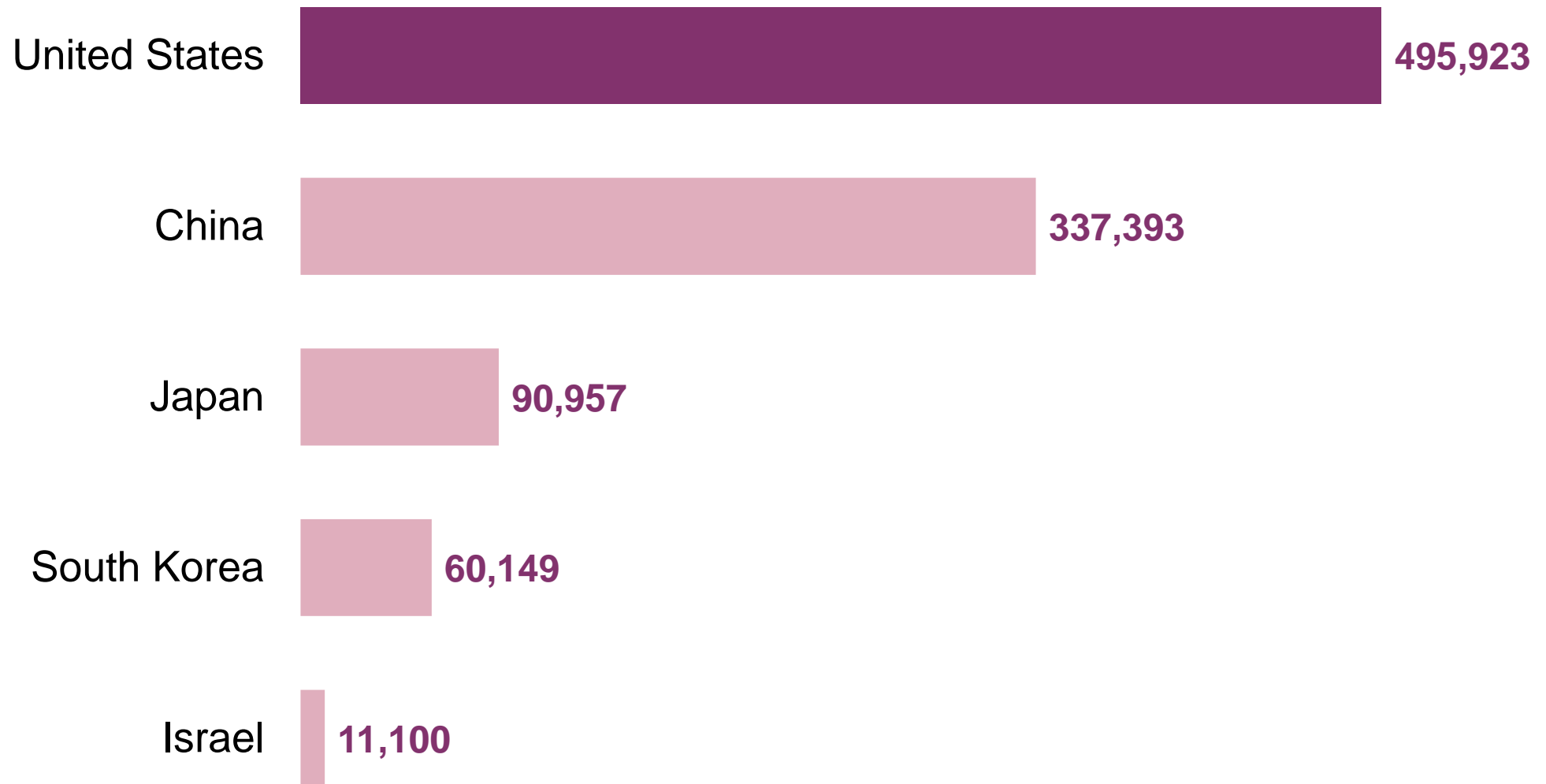
Number of publications peaked in 2016



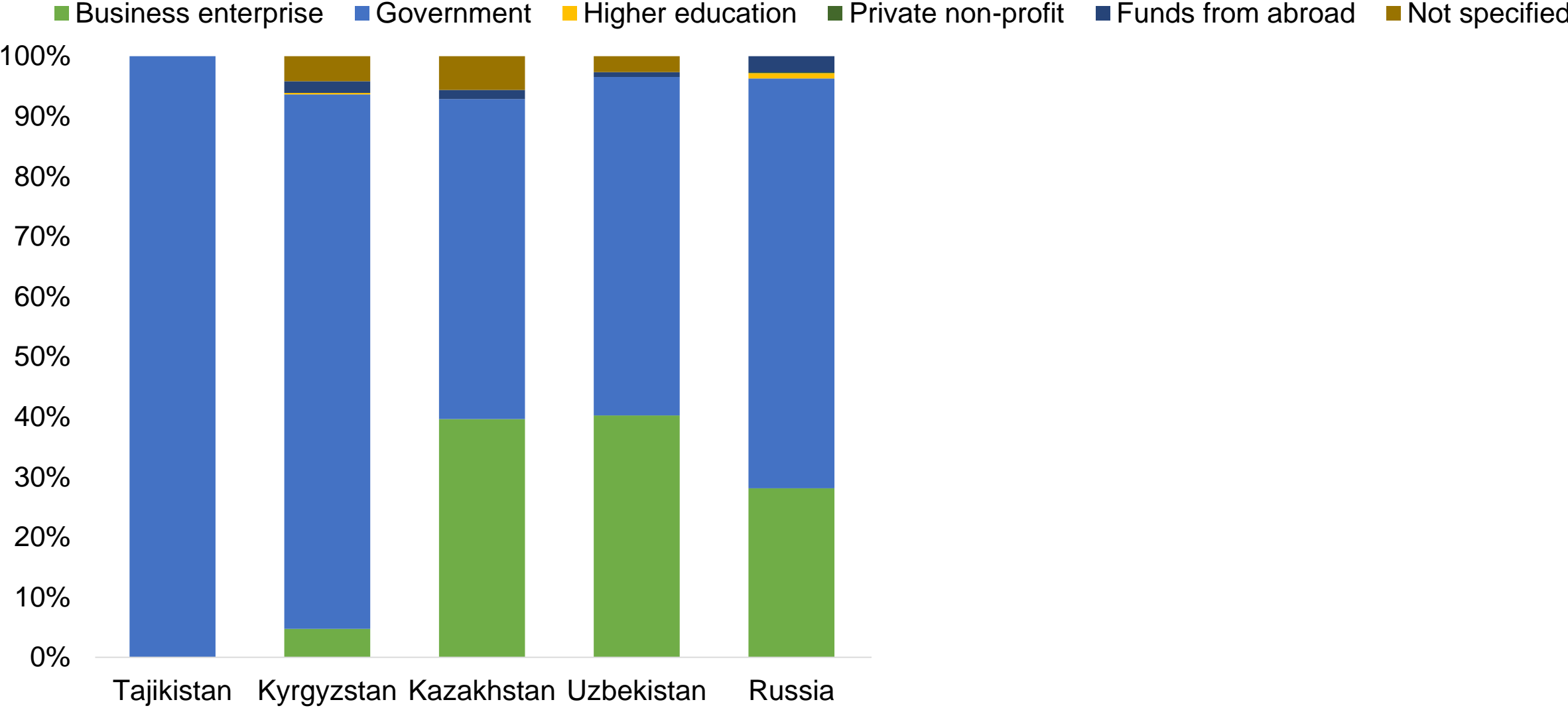
Kazakhstani scientists' works are cited more often



Meanwhile ...



The government remains to be main R&D funding source in Central Asia (2016)



Policy issues

Productivity and quality of research and innovations:

Inefficiency of processes and workers (e.g. bureaucracy)

Unproductive policies (e.g. increasing aggressively quantity of publications)

Lack of R&D outcome commercialisation (i.e. new knowledge is not transferred to the market)

Policy issues


Underinvestment in R&D

Little motivation of private sector to invest

Heavy tax burden



Establishing public-private partnerships and international collaborations in R&D

A close-up photograph of a person's hand in a dark suit sleeve, holding a wooden block. The block is part of a long, curved line of identical wooden blocks, resembling a domino chain. The lighting is dramatic, with a bright light source from the upper right, creating strong highlights and deep shadows. The background is a dark, textured surface.

Carrying out business and research process
reengineering

Providing tax incentives

FOR YOUR DAILY MONEY MANAGEMENT

| DATE | ITEM / RB | INCOME / CA | EXPENSE / CB | BALANCE / RB | NOTE |
|------|-----------|-------------|--------------|-------------------|------|
| 15/2 | Salary | 15,000 | | 15,000 | |
| 19/2 | | | 4,200 | 11,000 | |
| | | | 570 | 10,230 | |
| | | | 1,000 | 9,230 | |
| 27/2 | Interest | 850 | | 10,080 | |

R&D in Uzbekistan is on the verge of
extinction, but we can give it a second life