



World Intellectual
Property Report

Making
Innovation Policy
Work for
Development

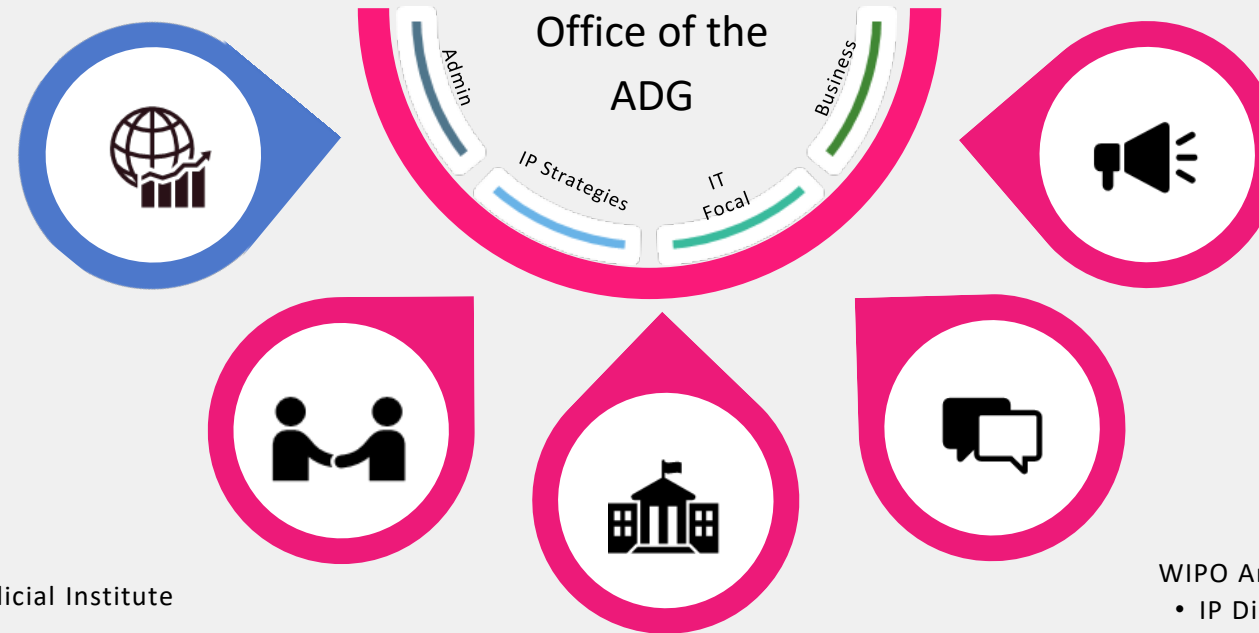
Making Innovation Policy Work for Development

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IP & Innovation Ecosystems Sector (IES)



Department for Economics and Data Analytics

- GII, [WIPR](#), WIPI
- IP statistics and data analytics
- Economic research (Creative Economy & Innovation Economy)

IP for Business Division

- Develop Tools and Materials for Businesses
- Work with SMEs Intermediaries and National IP offices
- IP Management Clinics
- Inventor Assistance Program
- Patent Drafting Programs
- IP Financing & valuation
- IP Commercialization

WIPO Judicial Institute

- Judicial dialogue
- Judicial resources
- Judicial capacity building
- WIPO Lex – laws, treaties, judgements

IP for Innovators Department

- TISCs/TT structures
- Digital Support (WIPO INSPIRE)
- Technology Transfer
- Patent Analytics
- Institutional IP Policies
- IP Commercialization (universities & R&D institutions)

WIPO Arbitration and Mediation Center

- IP Disputes
- Domain Name Disputes
- ADR Collaborations
- ccTLD Collaborations

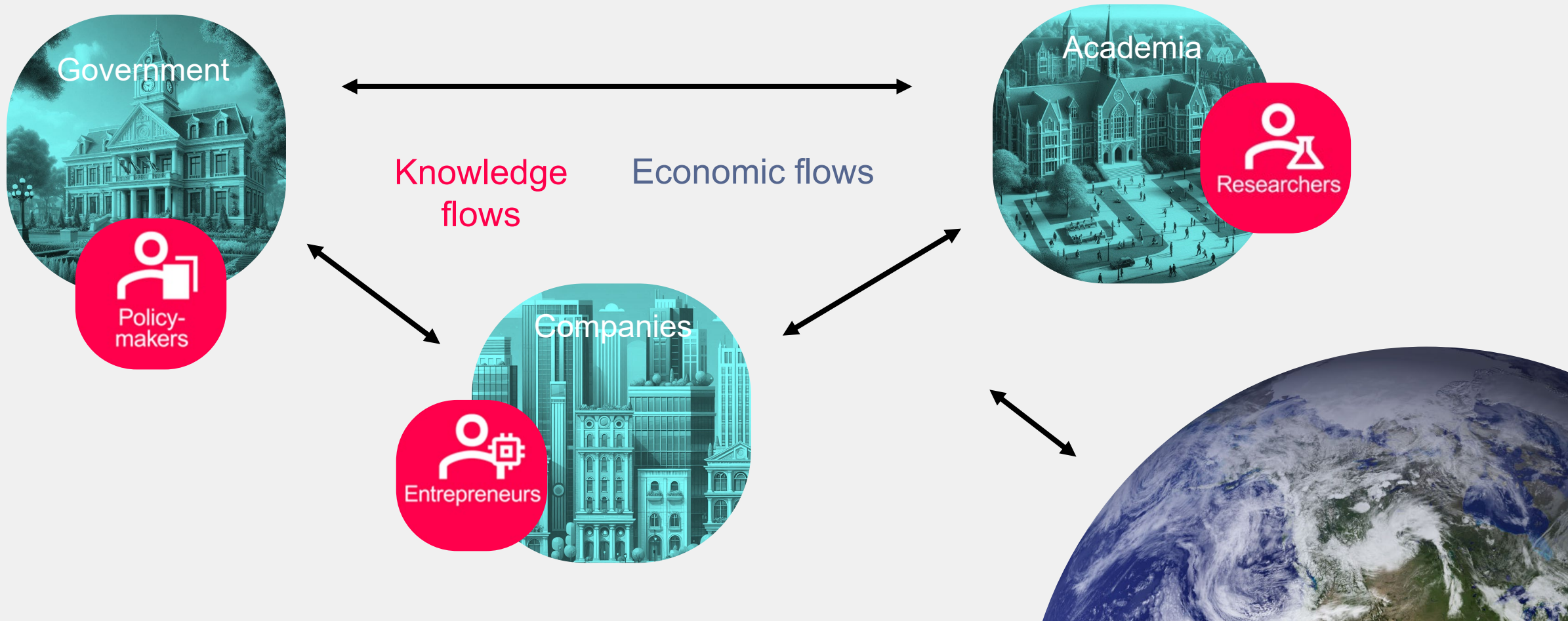
Making Innovation Policy Work for Development

The 2024 edition of the World Intellectual Property Report highlights the impact of innovation and industrial policies to help leverage the capabilities of an innovation ecosystem.



Innovation Ecosystems

Individuals and organizations that facilitate the generation, acquisition and diffusion of new knowledge.



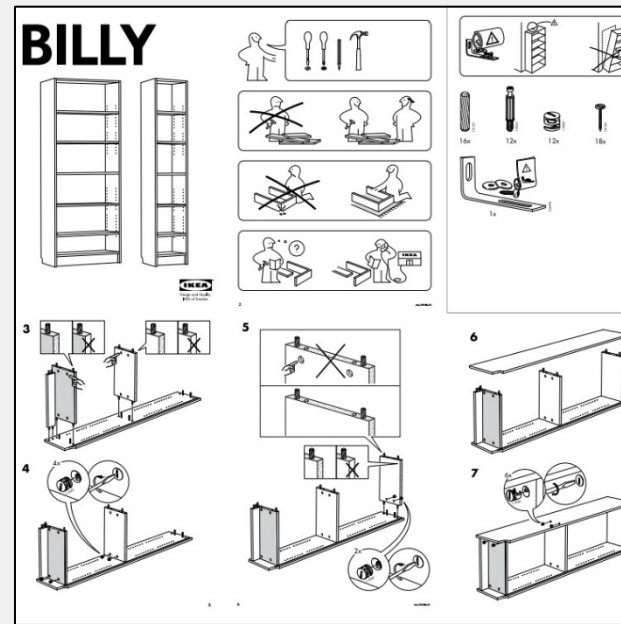
Knowledge flows

*They improve the **capacity** of places to absorb, create and apply new knowledge.*

Tools can be shipped



Codes can be shared

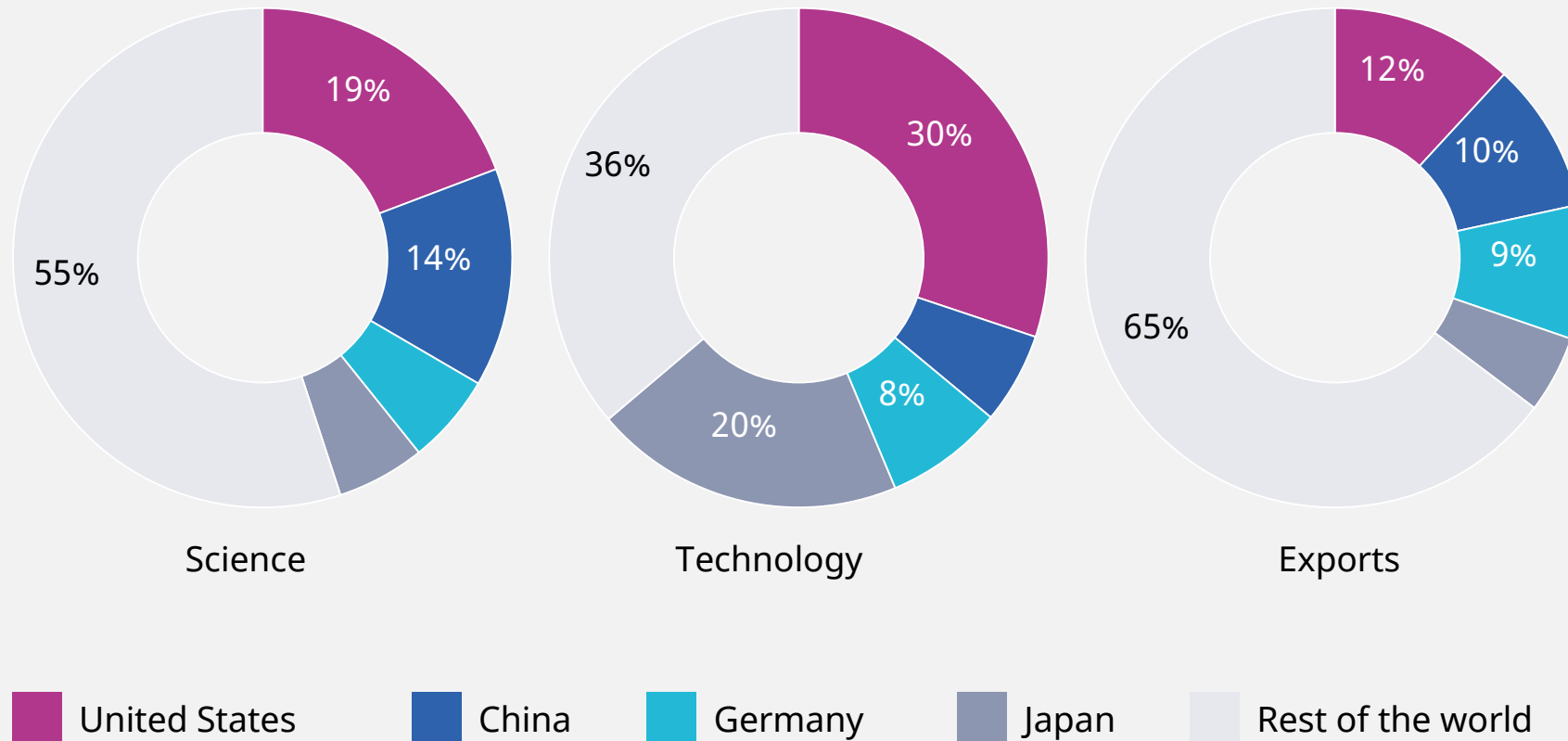


Know-how is in brains



Innovation is concentrated

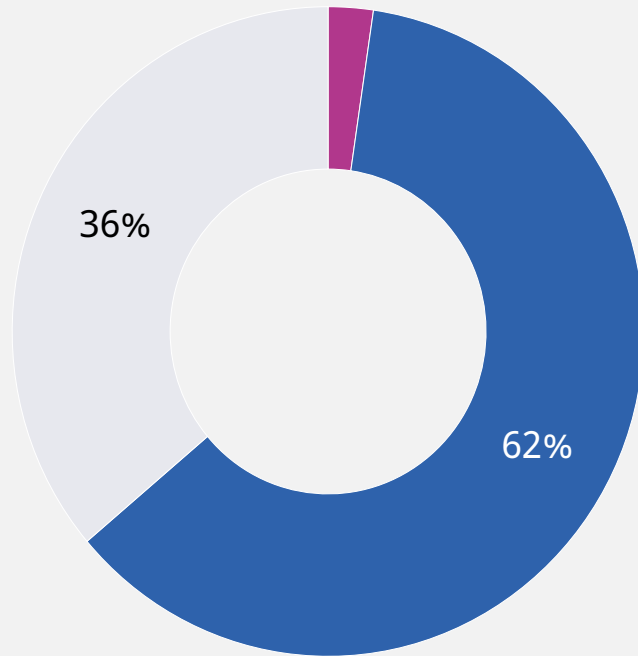
Distribution of scientific articles, patents and exports, by country of origin, 2001-2020



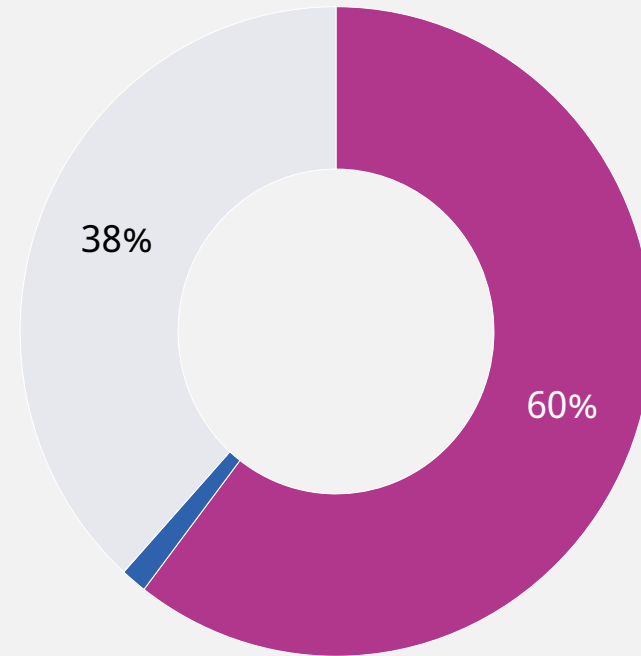
Countries specialize in different fields of innovation

Exporters of selected products in 2021

■ United States of America ■ Germany ■ Rest of the World



Stereoscopic microscopes



Aircraft landing gears



Innovation & policies

Economies **boost innovation and drive development** by building, diversifying and applying knowledge

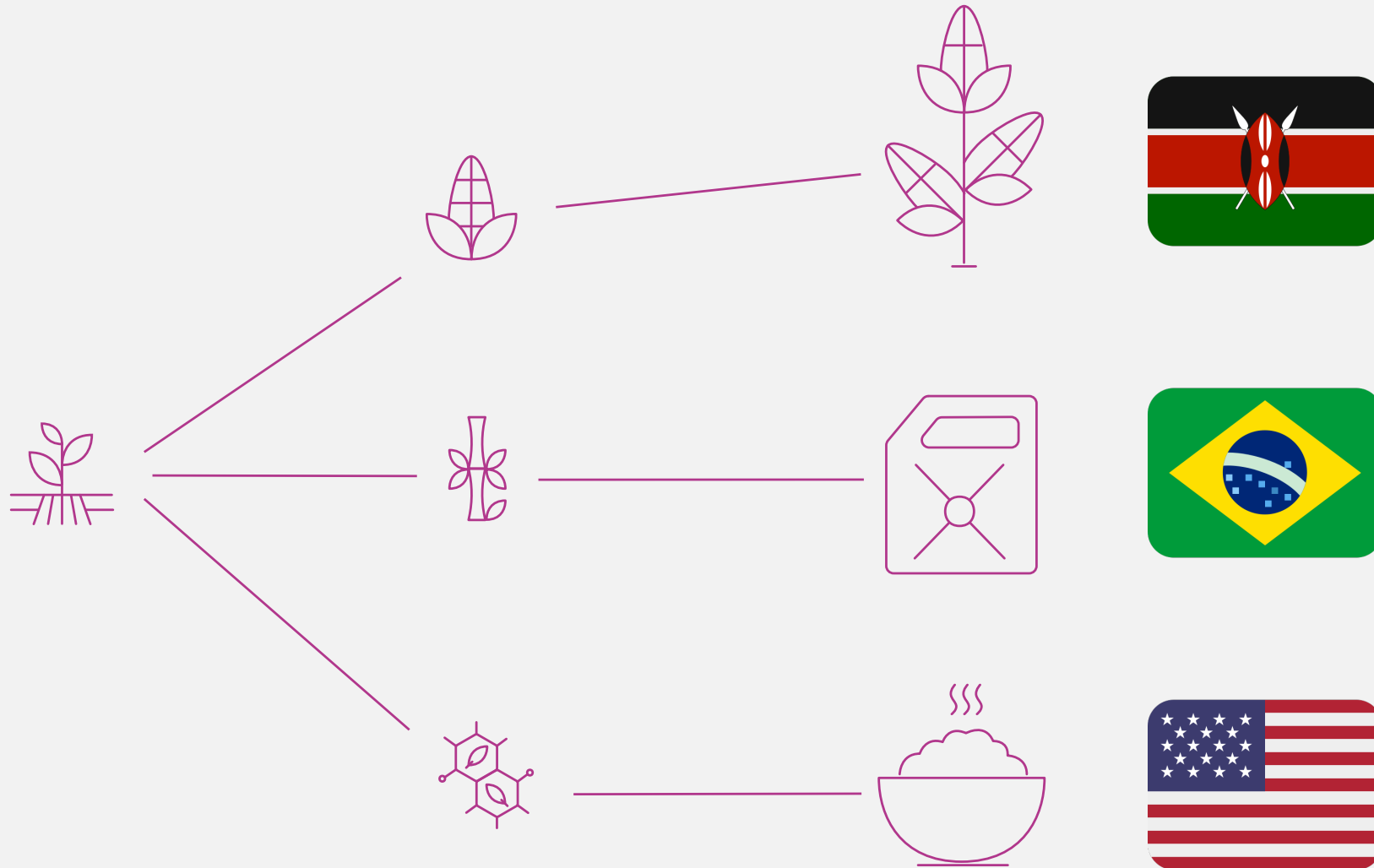
Innovation capabilities and complexity indicators can **inform industrial and innovation policy design**

Innovation ecosystems can strategically support technologies **spawning future innovation and industrial development**

To promote development, we need to support **economies in designing innovation policies based on sound evidence**

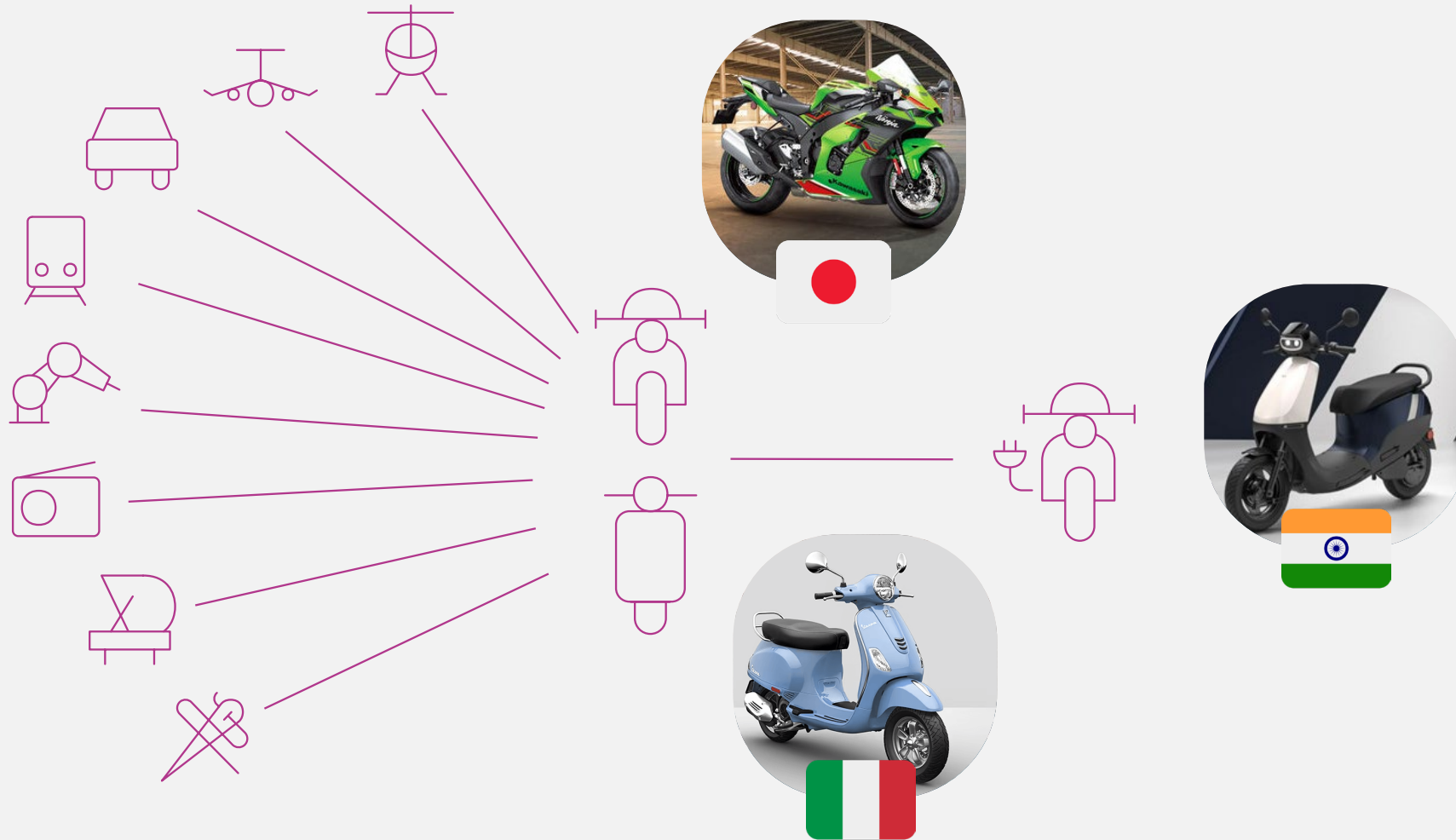
Different ways to leverage local know-how

New opportunities can be leveraged from existing capabilities.



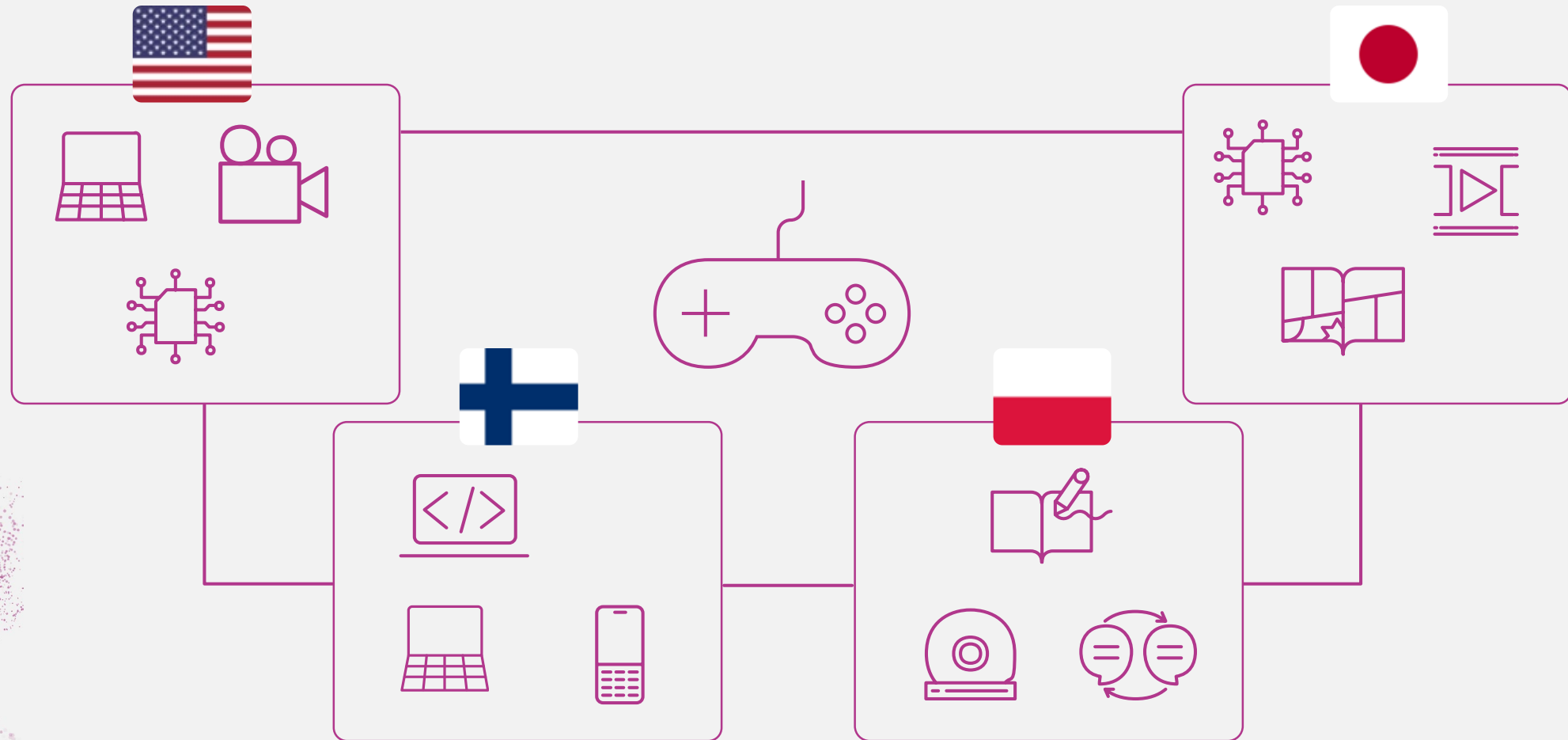
Different ways to leverage local know-how

The motorcycle industry had similar paths around the world, with each ecosystem adding their own spin based on their capabilities...



Finding relations between capabilities

The creation of the video game industry came from an unapparent connection of knowledge.



Innovation capabilities

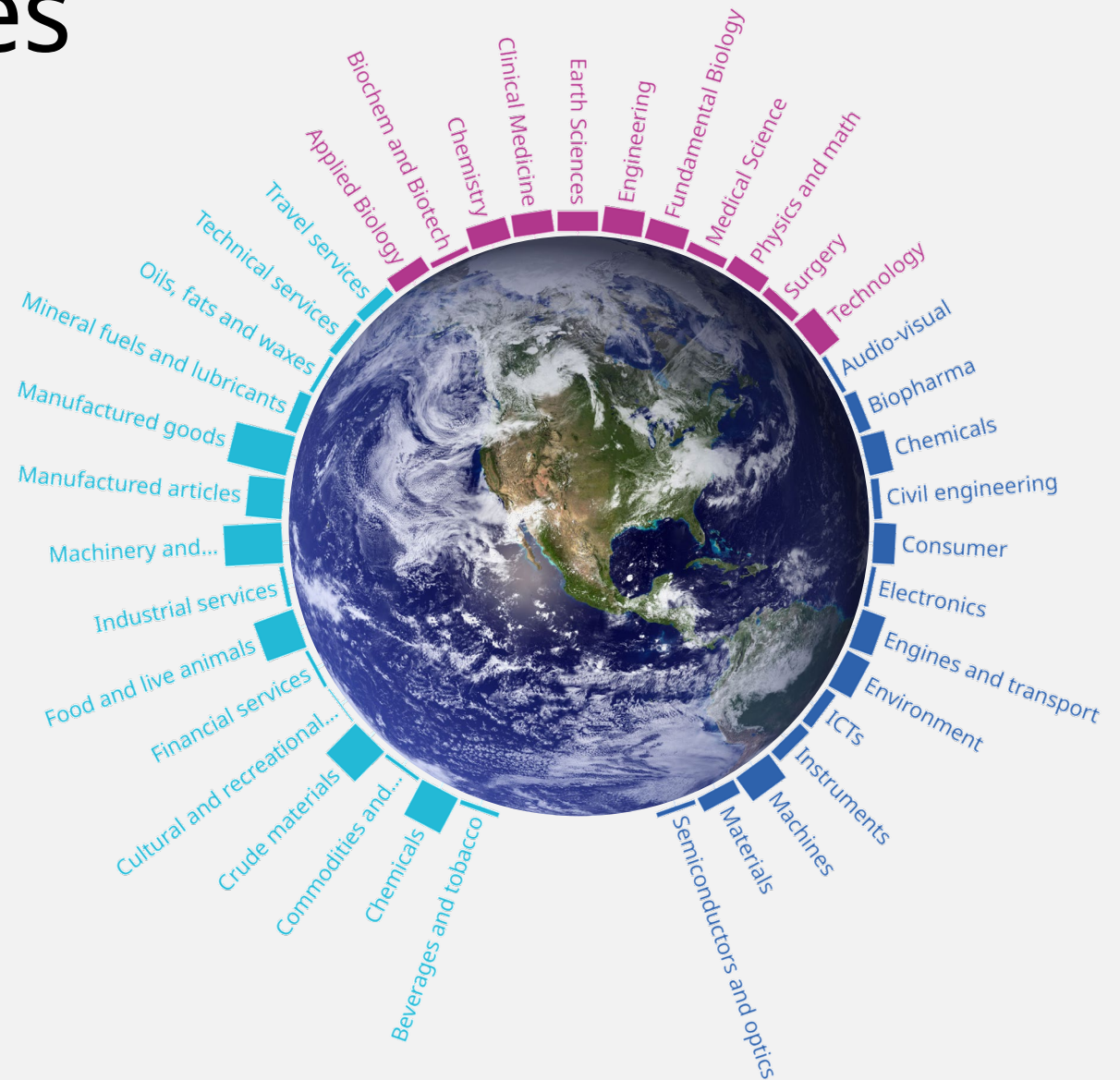
Using big data to map know how at world scale.

154 Member States

626 Innovation Capabilities

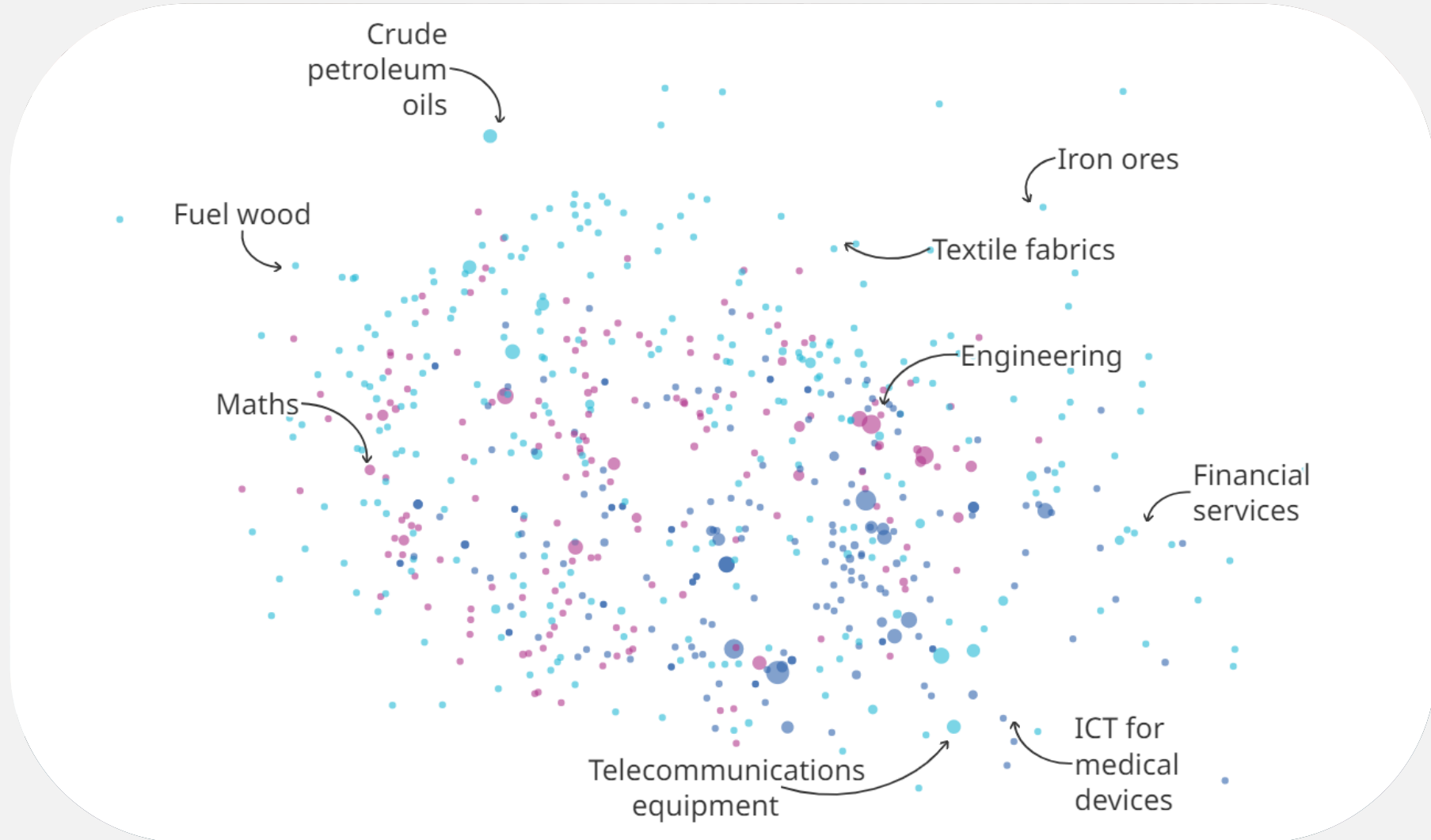
- 169 **scientific** (publications)
 - 11 domains
- 172 **technological** (patents)
 - 13 domains
- 285 **productive** (exports)
 - 15 domains

70 + **38** + **308**
million researchers million inventors trillion dollars in exports

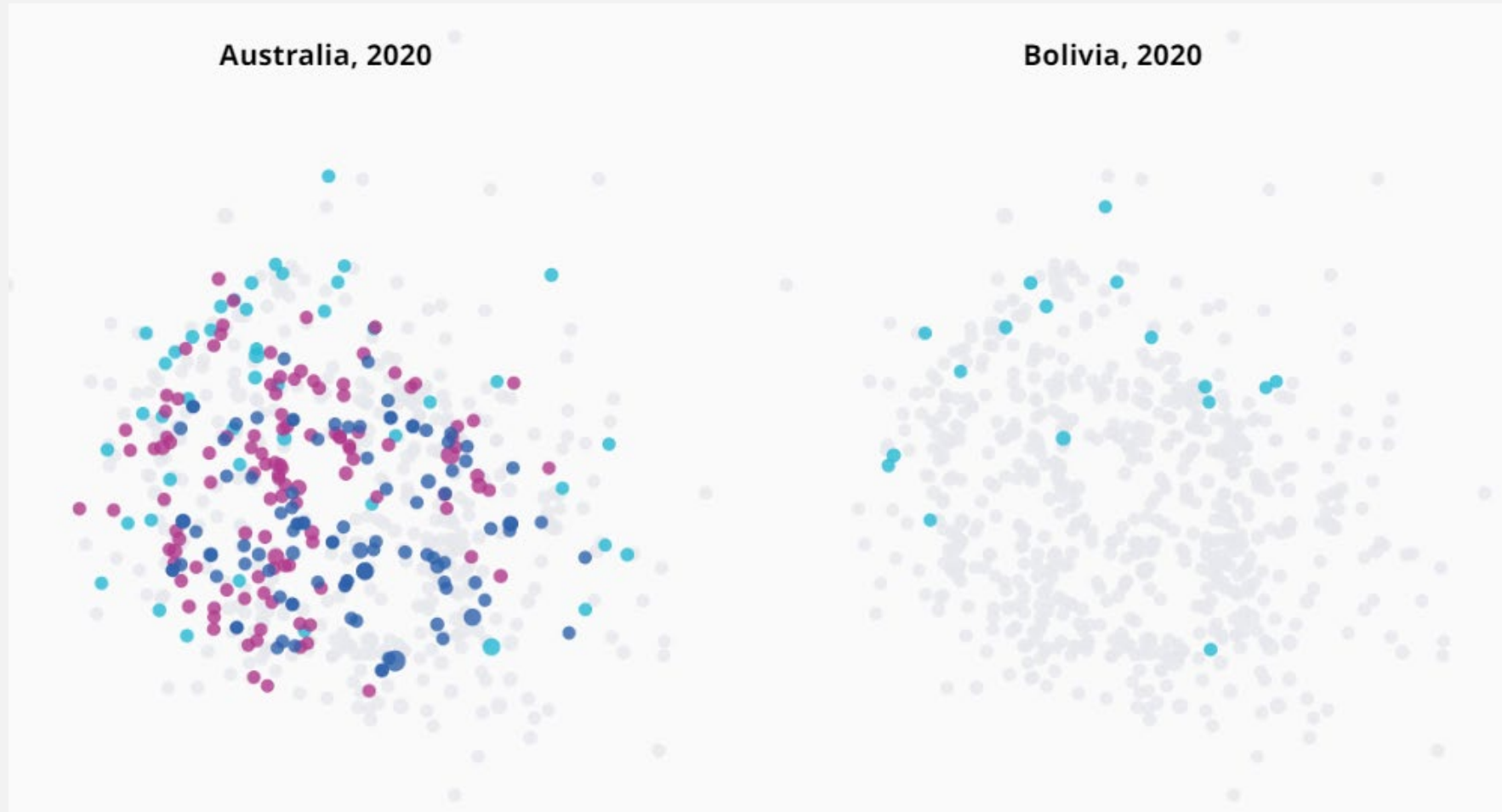


The capability space - World

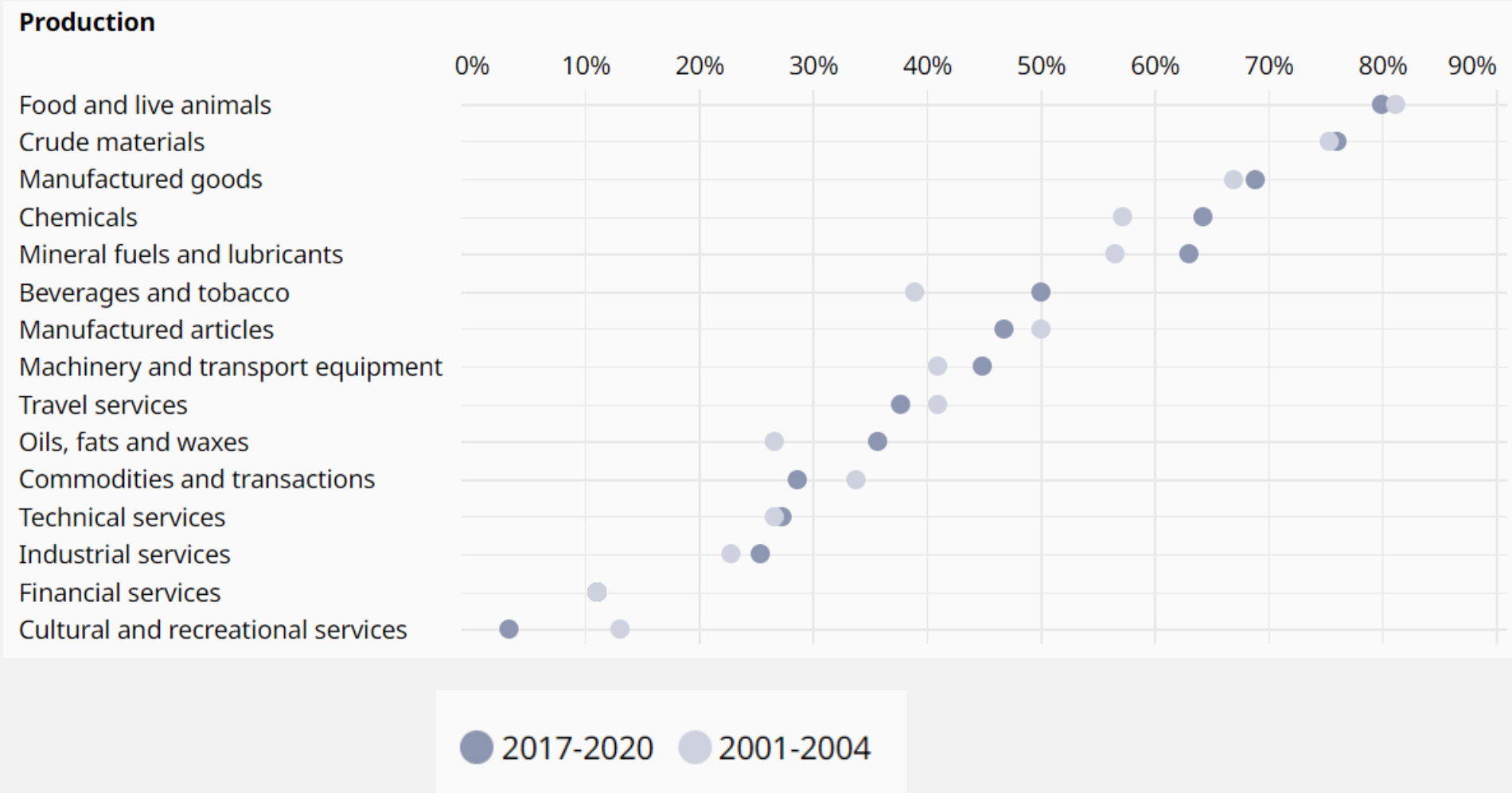
All capabilities



The capability space – Australia & Bolivia

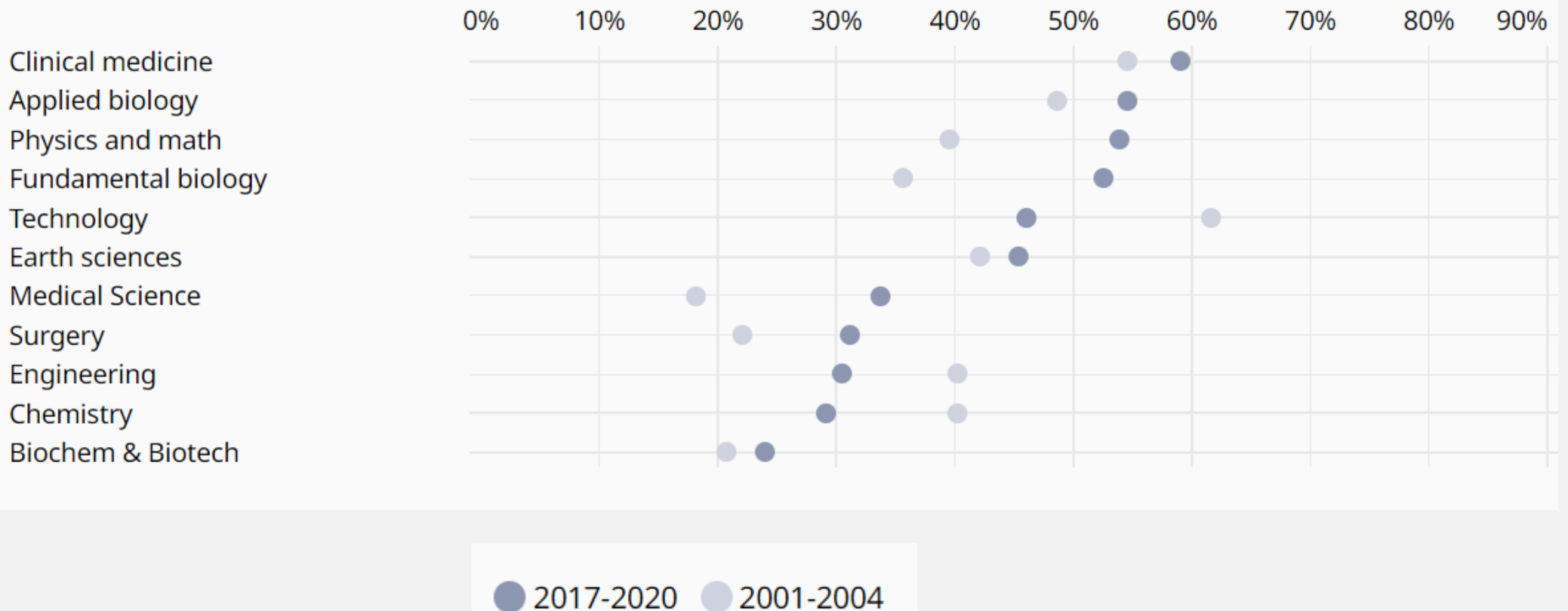


Countries' specialization varies substantially across capabilities

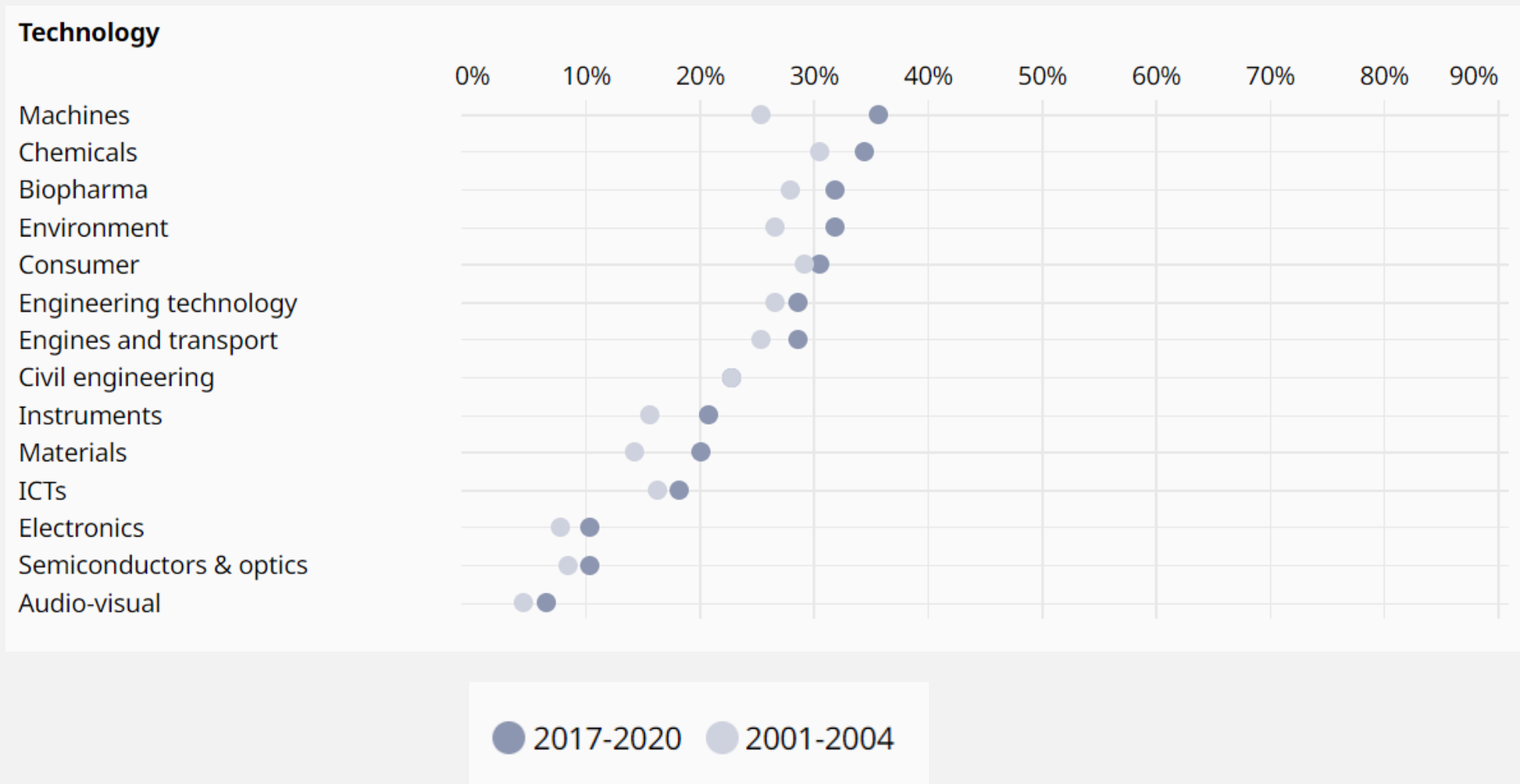


Countries' specialization varies substantially across capabilities

Science

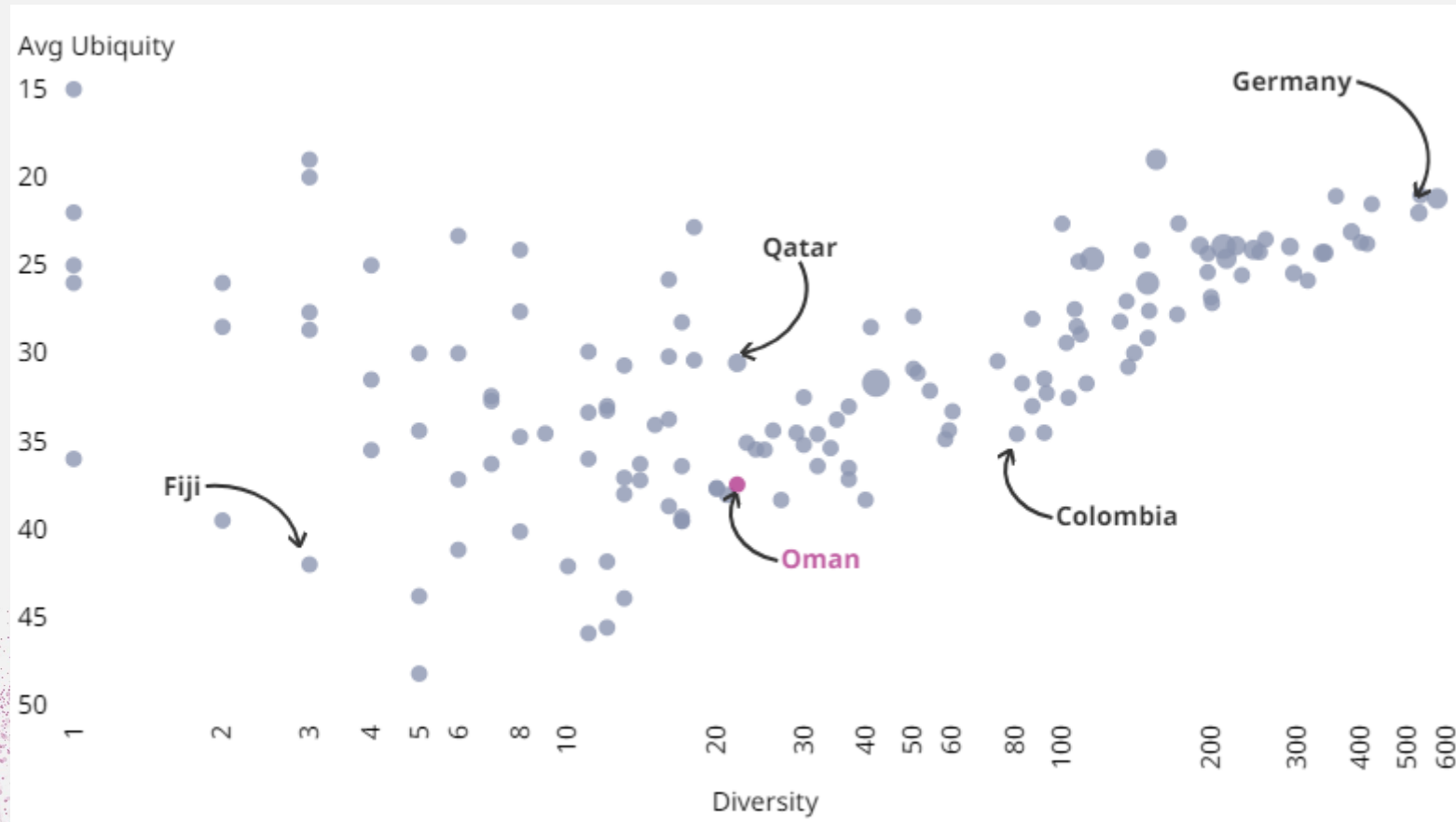


Countries' specialization varies substantially across capabilities



Where are these capabilities?

Some capabilities are harder to find than others, and only appear in diversified ecosystems.



Average Diversity

SCI

29

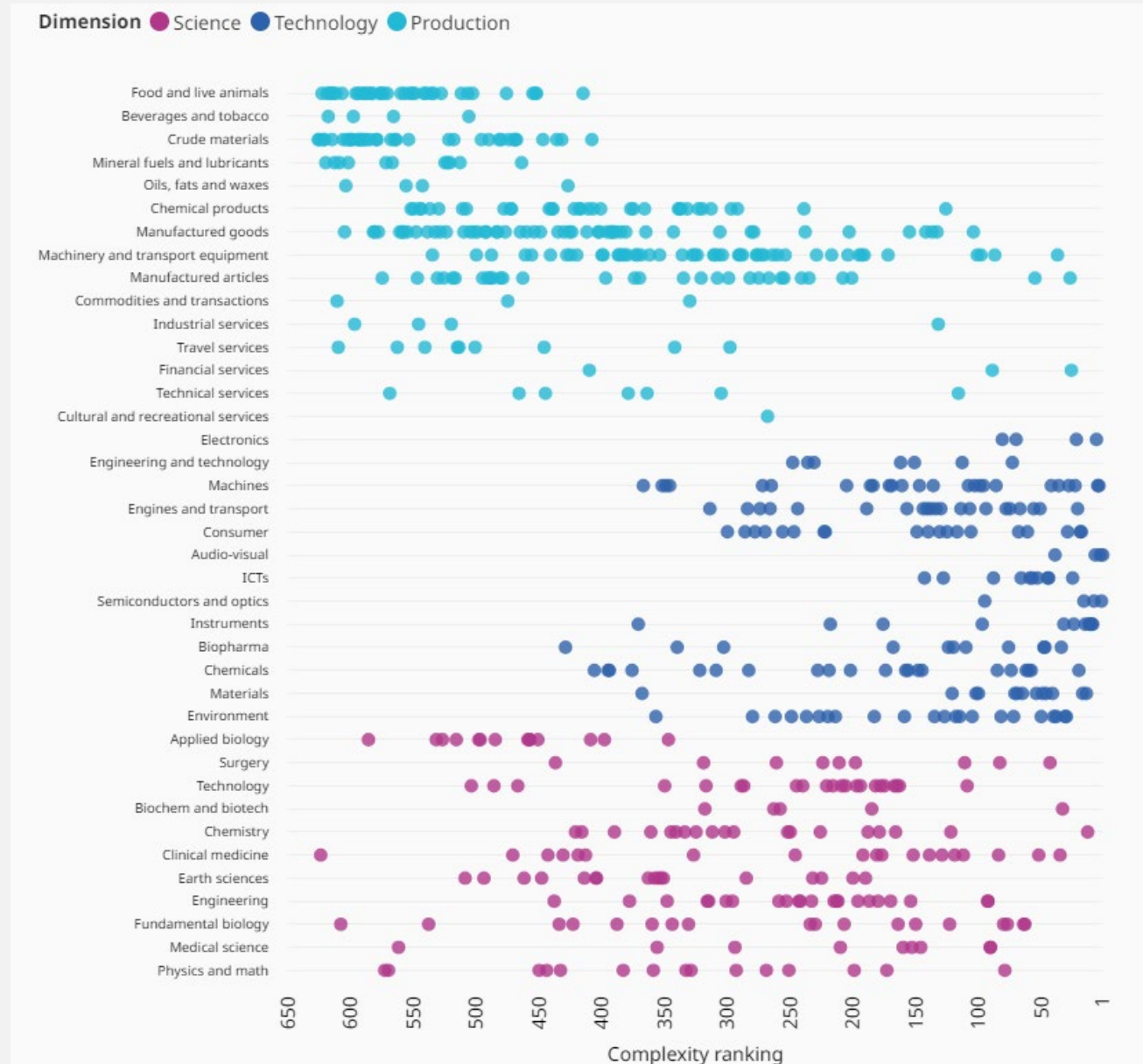
TECH

18

PROD

41

Innovation capabilities ranked by complexity



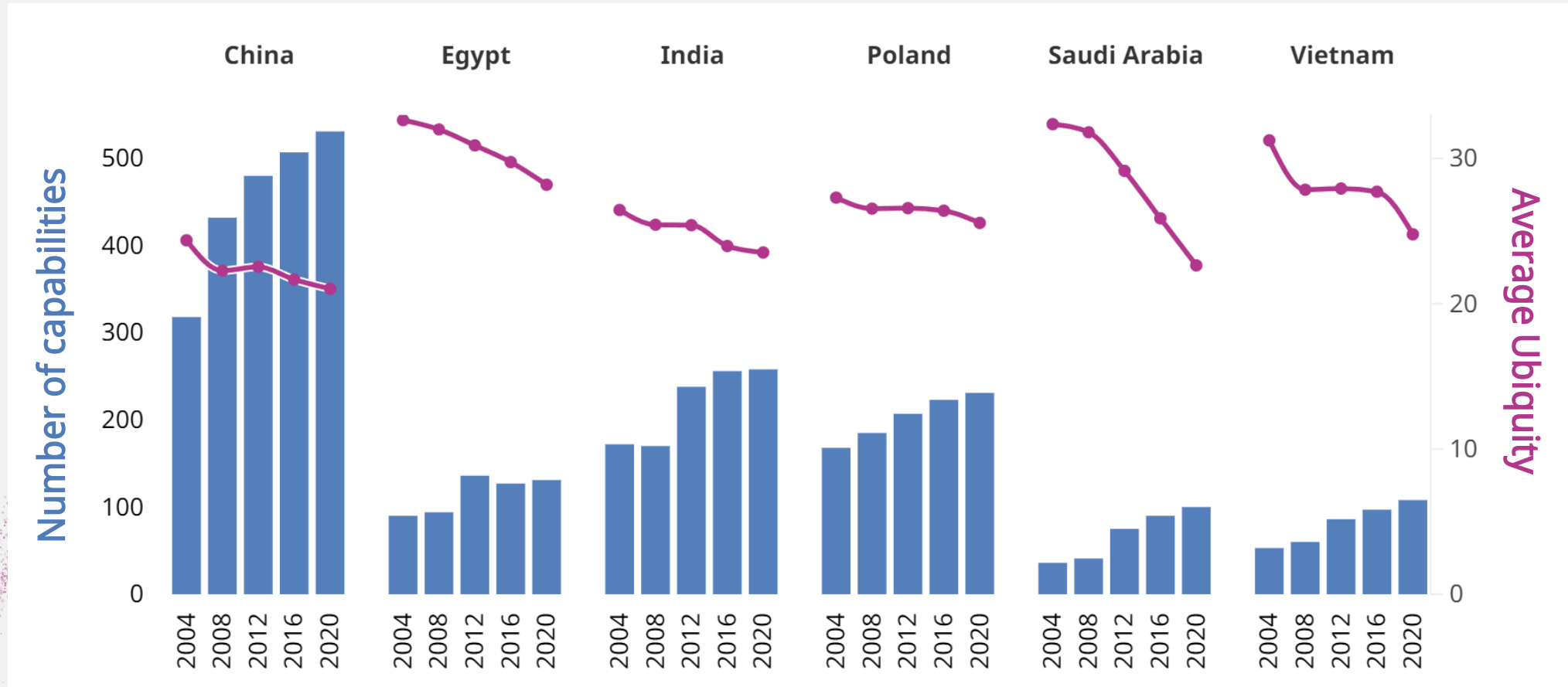
Innovation capabilities ranked by complexity

Dimension ● Science ● Technology ● Production ● Unattained



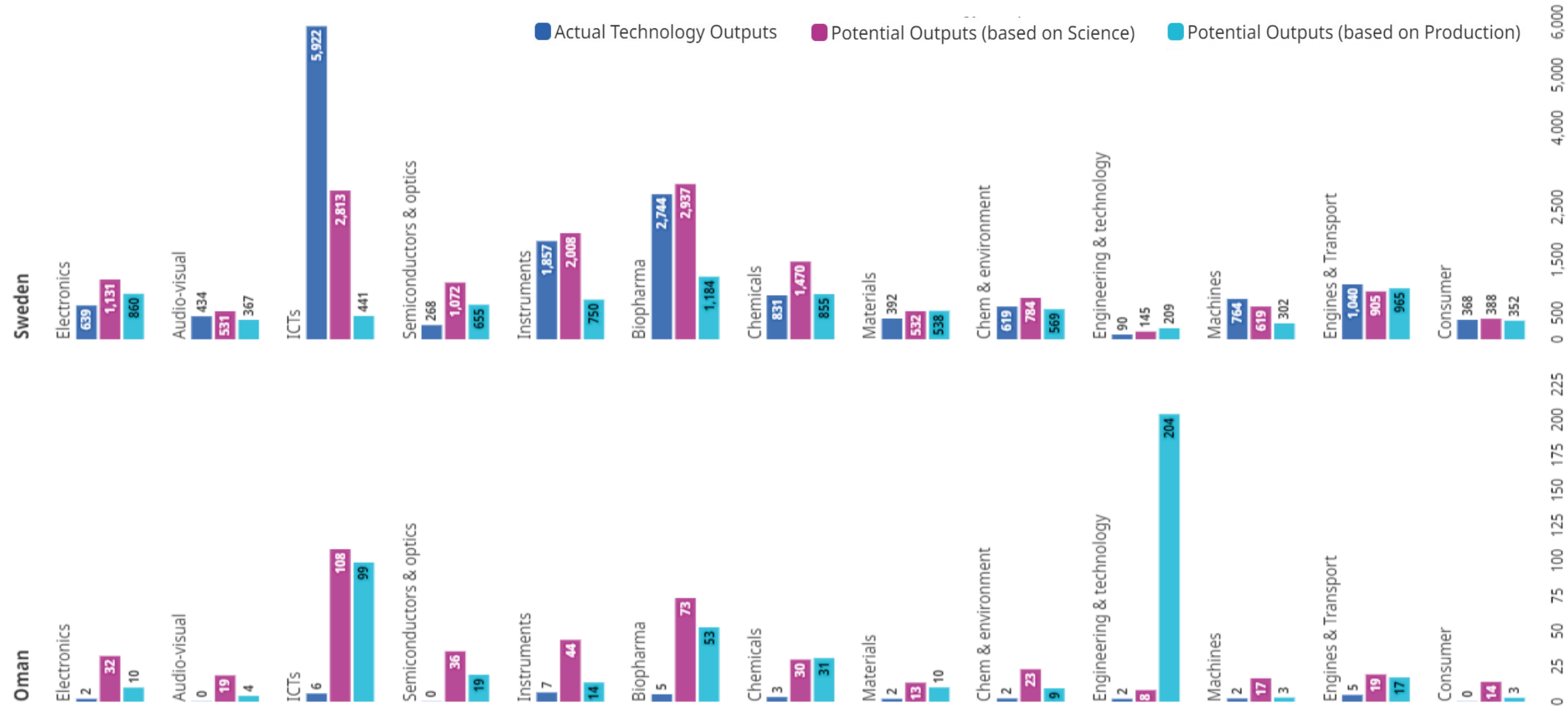
Diversification process

As countries develop new capabilities, these tend to be rarer.



Technological potential

Sweden vs. Oman



Summing up

- A functioning innovation ecosystem is crucial for **creating new knowledge** and **incorporating knowledge** generated elsewhere.
- By gaining new innovation capabilities, countries can lay the foundations of **long-term growth, resilience and competitiveness**.
- **Smart policy design must rely on empirical evidence** to prioritize fields and identify opportunities and bottlenecks in their innovation ecosystems.



Thank you!

Access the report



wipo.int/wipr

