SCWS 2017

Co-Design of the Global STI Ecosytem for SDGs

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Ministério da Saúde

FIOCRUZ
Fundação Oswaldo Cruz

Agenda 2030

- Consensus of 193 Countries

- Universal, Indivisible, Integrated and Aspirational

- Articulates the Economic, Social and Environmental dimensions.

- " No One Left Behind"

Harnessing STI to SDGs

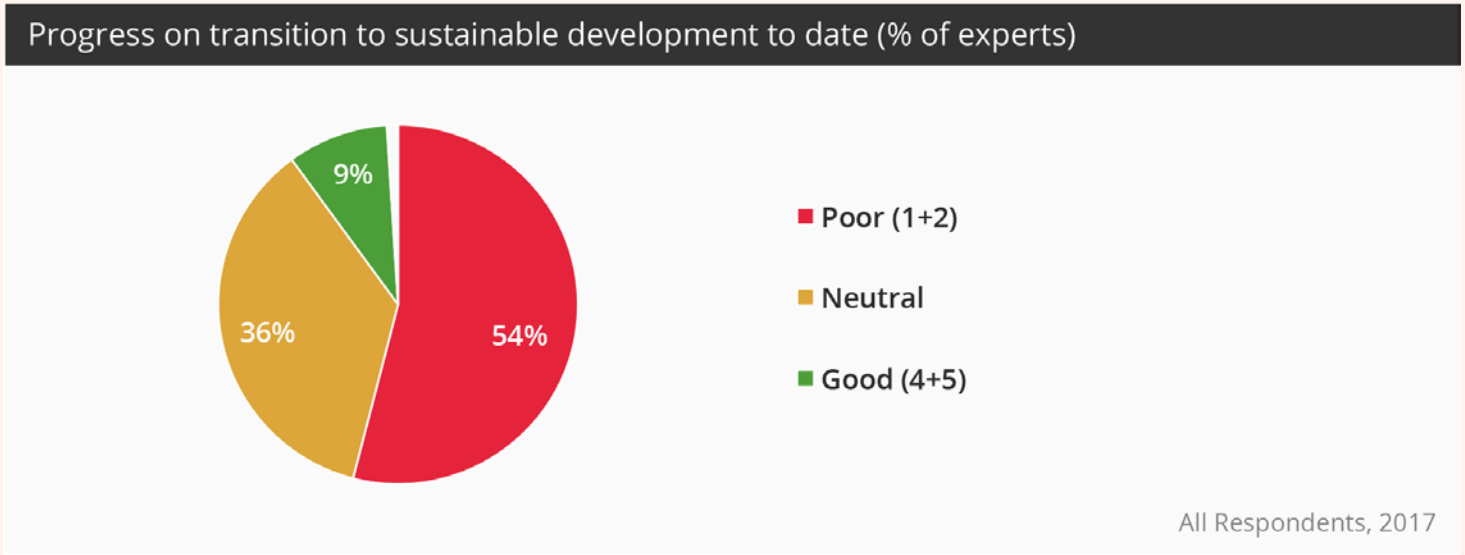
- Technology Facilitating Mechanisms (TFM)
- Social and Cultural Context
- Diverse Sources of Knowledge
- Funding and Innovative Governance
- Innovation Ecosystems and National Roadmaps
- Social and Emerging Technologies
- Public Perception and Citizen Engagement on STI Policies

169 targets - 231 indicators

“Leaving no one behind with equality front and centre”

Overall Progress

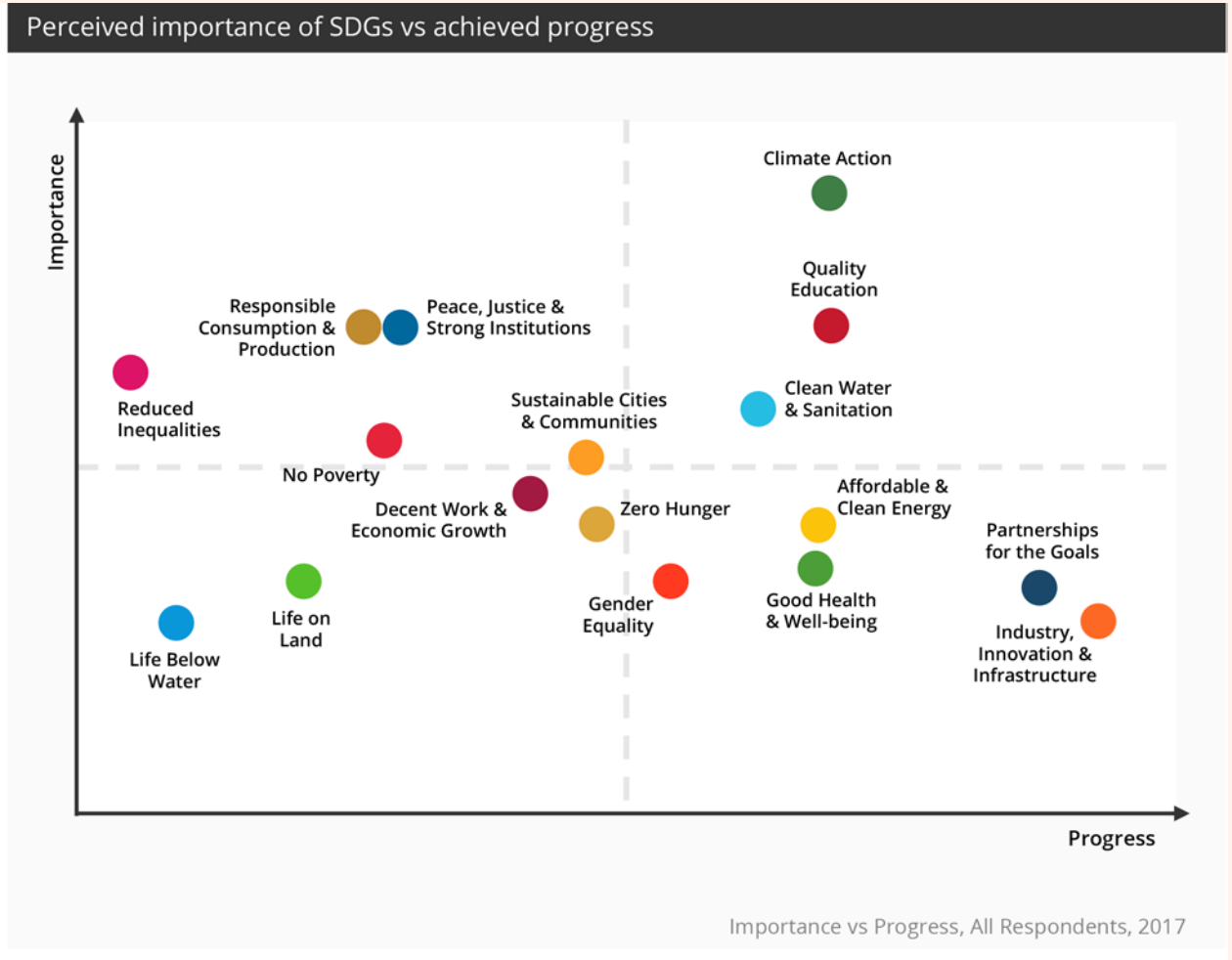
How do experts rate progress on the transition to sustainable development



16 March 2017 – Findings from the latest GlobeScan/SustainAbility Survey

Importance VS Progress

Gauging the perception of SDG importance vs achieved progress



16 March 2017 – Findings from the latest GlobeScan/SustainAbility Survey

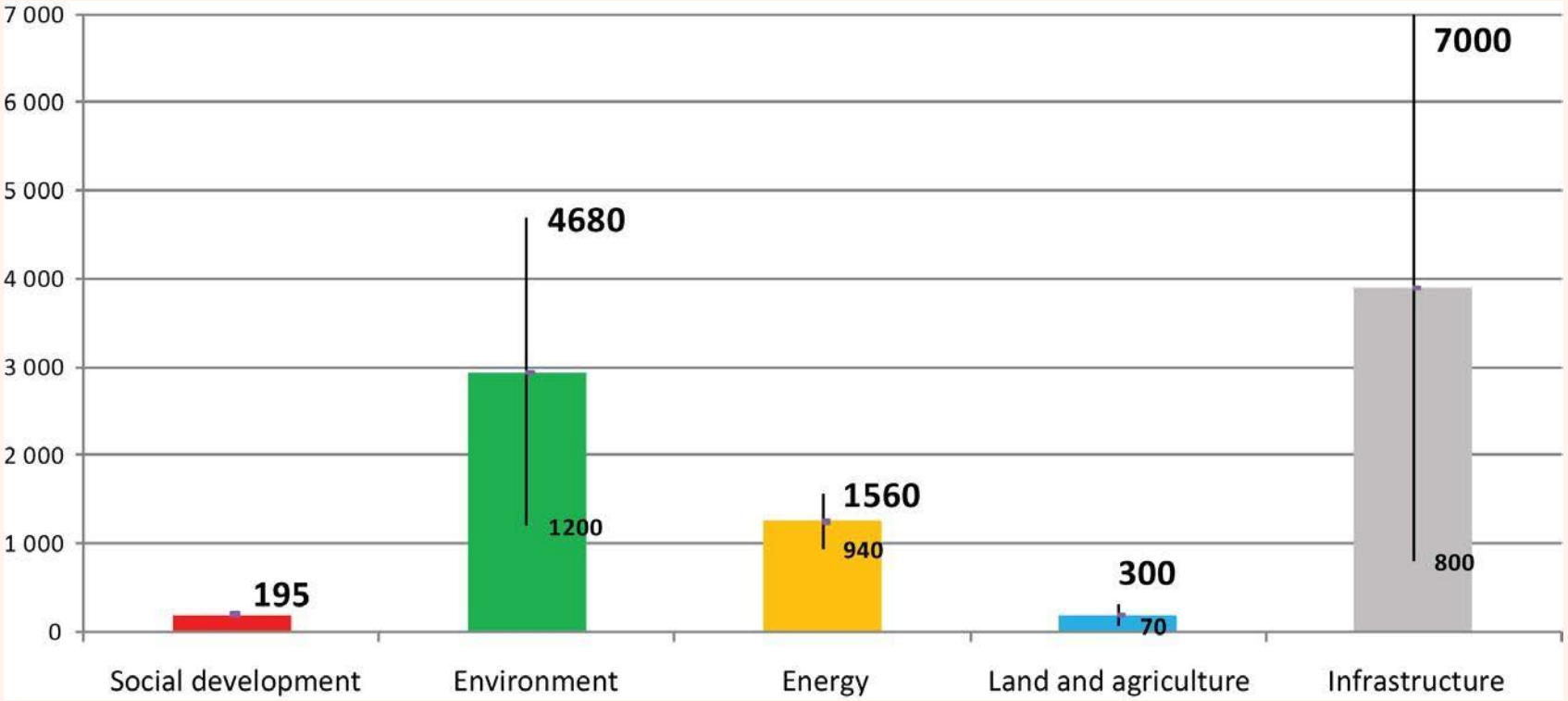
How organization is contributing or planning to contribute toward SDGs (% of experts)

Total Mentions, Corporate Respondents (n=104), 2017

Achieving the Goals of the 2030 Agenda will take between US$ 3 trillion and US$ 14 trillion in total

ESTIMATED ANNUAL FINANCING NEEDS FOR SELECTED SUSTAINABLE DEVELOPMENT GOALS

(Billions of dollars)



Source: United Nations, Report of the Intergovernmental Committee of Experts on Sustainable Development Financing (A/69/315), New York, 2014.

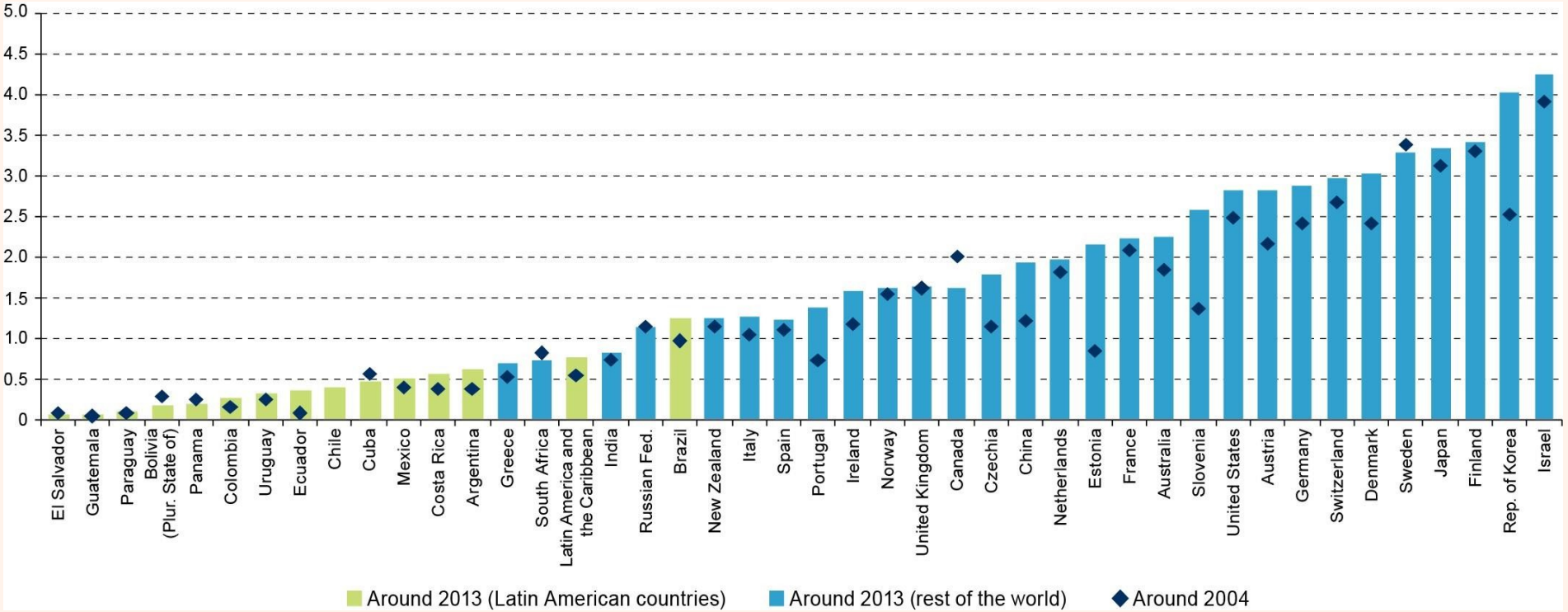
Development, Innovation and Social Change

"Economic development can be defined as a process of social change by which the growing number of human needs , preexisting or created by change itself, are satisfied through a differentiation in the productive system generated by the introduction of technological innovations " (Furtado, 1964)

Without building endogenous capacities in new technologies, vulnerabilities cannot be reduced

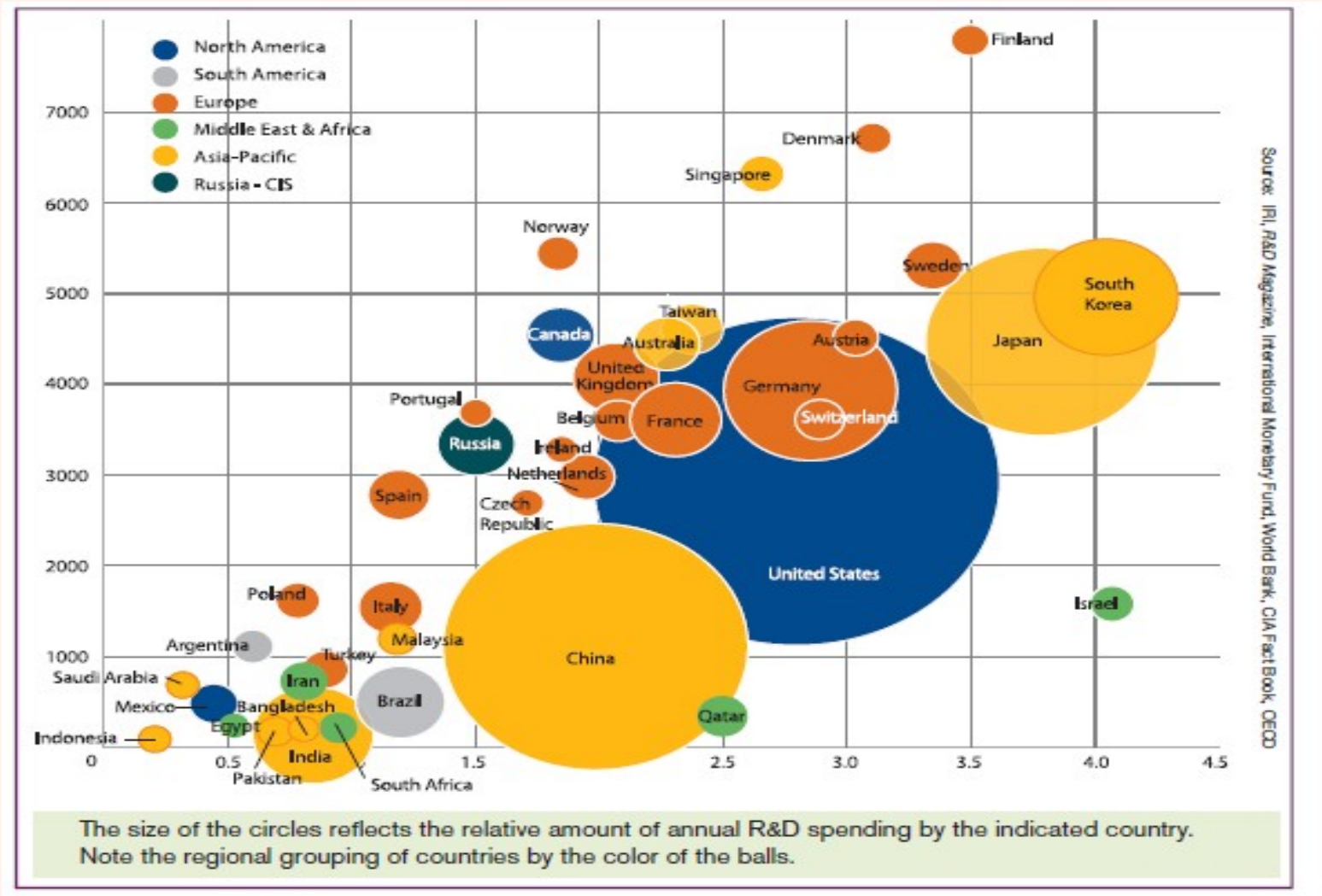
INVESTMENT IN RESEARCH AND DEVELOPMENT (R&D), AROUND 2013 AND 2004

(Percentages of GDP)



Source: ECLAC, *Ciencia, tecnología e innovación en la economía digital La situación de América Latina y el Caribe*, LC/G.2685(CCITIC.2/3)), Santiago, September 2016.

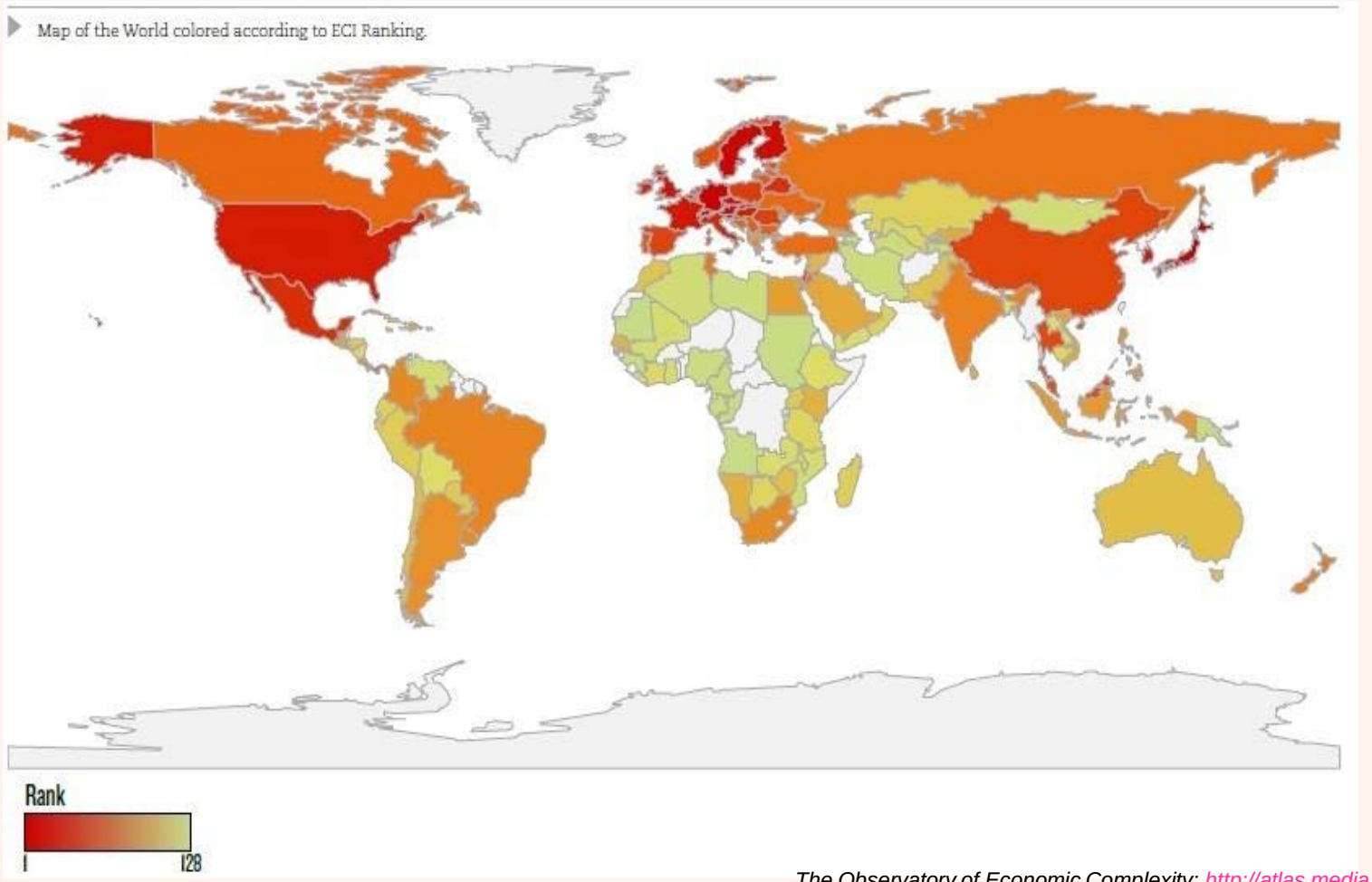
Global R&D Expenses: Clear US, China and Developed Country Leadership



The size of the circles reflects the relative amount of annual R&D spending by the indicated country. Note the regional grouping of countries by the color of the balls.

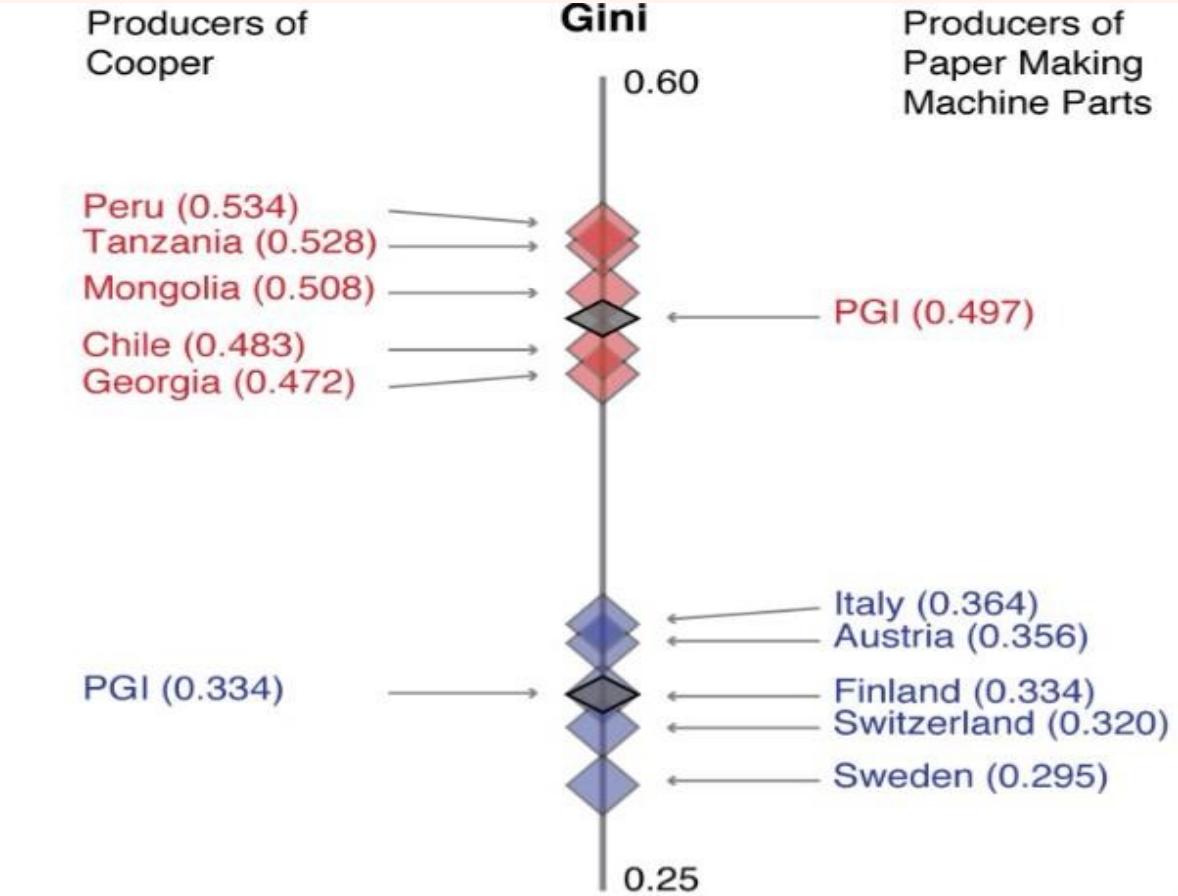
Fonte: Global R&D Funding Forecast, 2017, parceria CP-GIS/NEIT-UFF

International asymmetries: Global distribution of the most dynamic and knowledge intensive activities (map of complexity) - 2012



The Observatory of Economic Complexity: http://atlas.media.mit.edu/

The endogenous relationship between productive structure and inequality: the economic and political basis of social determinants



Fonte: Hidalgo, Linking Economic Complexity, Institutions and Income Inequality

STATE: PROMOTION + REGULATION

BRAZIL: Economic-Industrial Complex (HEIC)

Industrial Sectors

Chemical and Biotechnology industries

- Medicines
- APIs
- Vaccines
- Blood Products
- Serum and Toxins
- Reagents for Diagnosis

Mechanic, Electronic and Materials Industries

- Mechanical equipments
- Electronical equipments
- Prostheses and ortheses
- Materials

Health Services

- Hospitals
- Ambulatories
  Home care Services
- Diagnosis and Therapeutic Services

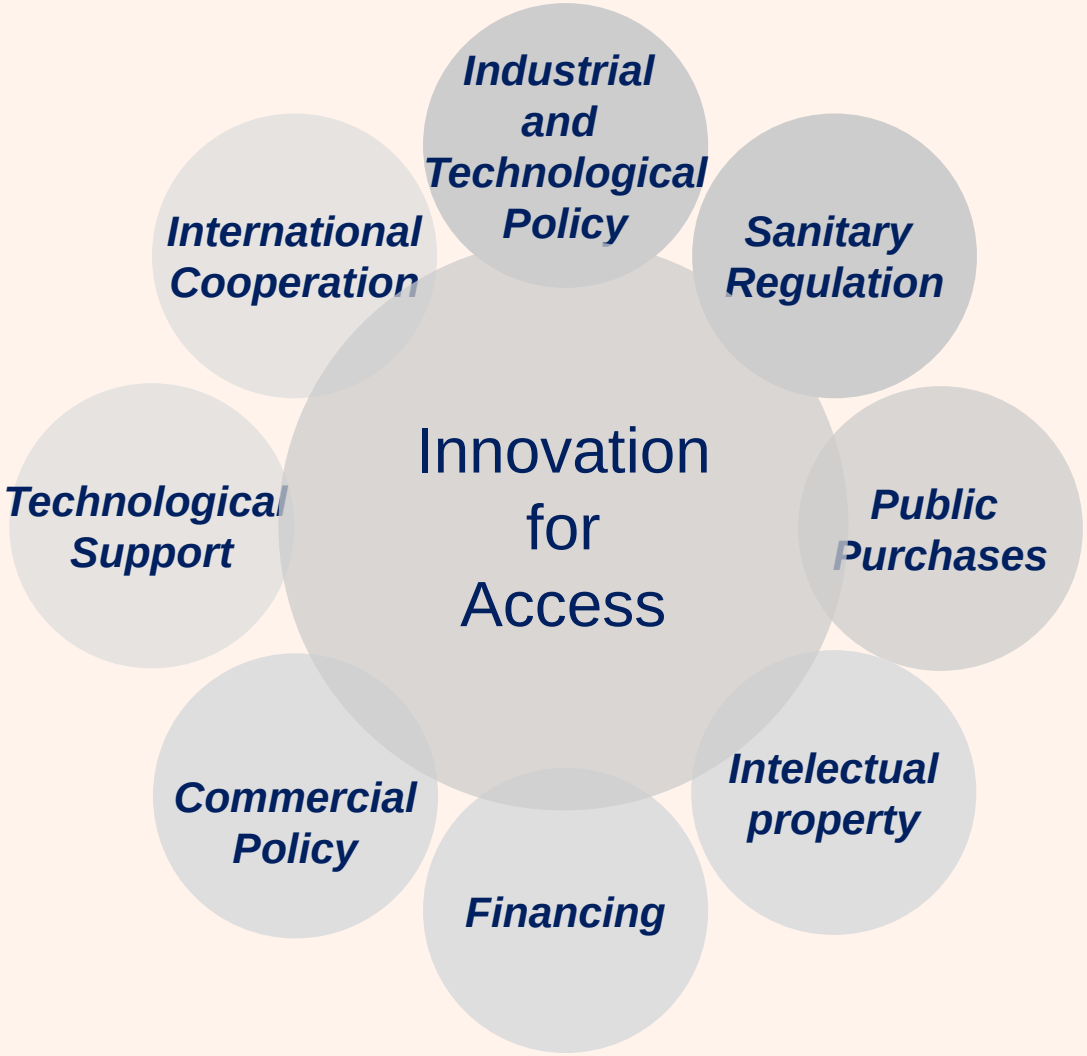
Source: Gadelha, 2003

Health Industrial Complex Executive Group - GECIS

Members:

I. **Ministry of Health (coordination)**
II. Ministry of Development, Industry and Foreign Trade - **MDIC**
III. Ministry of Planning, Budget and Management - **MPOG**
IV. Ministry of Finance
V. Ministry of Foreign Affairs - **MRE**
VI. Presidency - **Casa Civil**
VII. Brazilian Health Surveillance Agency - **ANVISA**
VIII. Oswaldo Cruz Foundation - **FIOCRUZ**
IX. Brazilian Development Bank - **BNDES**
X. National Intellectual Property Institute - **INPI**
XI. Institute Brazilian Agency for Industrial Development - **ABDI**
XII. National Institute of Metrology, Standardization and Industrial Quality - **INMETRO**
XIII. Studies and Projects Finance Organization - **FINEP**

Strengthening Industrial Policy



In short: to implement the 2030 Agenda

- Global, regional and national governance:
  - production of global public goods
  - reduction of power asymmetries in the global governance of monetary, financial, trade, technological and environmental matters
  - institutional cooperation and coordination within and between countries
  - development of low-carbon regional production chains
- Build the SDGs into national development plans, budgets and business models.
- Measure what we collectively decide: new indicators
- Means of implementation: financing, technology, fair trade and access to information.
- Intersectoral and inter-institutional coordination and participation of all stakeholders, including business and civil society.

Adapted from ECLAC

Museums and Science Centers as Arenas and Social Advocates for Agenda 2030

- " The Challenge is to create compelling experiences on subjects of importance in ways that increasingly attract societies to view museums as engaging resources of lifelong learning"

  (" Science Centers for This Century". Schiele, B. and Koster, E., ed., 1999)

- The Tokyo Protocol