



Webinar: Implications of COVID-19 for Public Health and the SDGs

Part IV: Global Economic Impacts

Health Production and Innovation Asymmetries: an urgent global challenge for the SDGs

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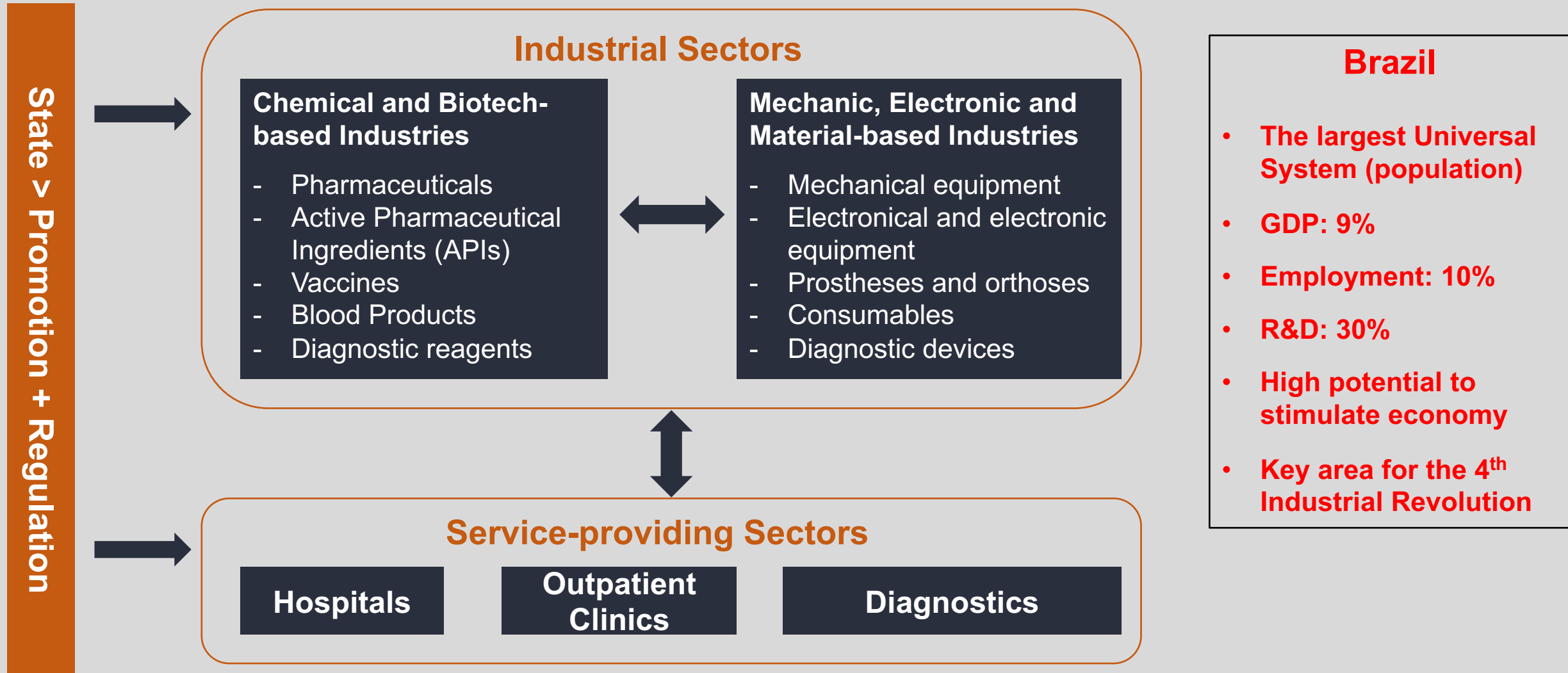
Rio de Janeiro, April 27th 2020

Key Points: from the problem...

1. Health must be considered a path for development. It is a part of human rights and one of the most preeminent areas to generate income, employment, investment and innovation (key area of the 4th Technological Revolution - AI, biotechnology, big data, genomics and others disruptive technologies)
2. Covid-19 global health pandemic reveals the systemic characteristics of health production and technology, involving, at the same time, diagnostic products, pharmaceuticals, vaccines, medical equipment, ventilators and personal protective equipment (PPE)
3. This systemic nature of health production and technology involves as well a close interdependence between the industrial base and the health services (from the primary health care to intensive care units - ICUs)
4. It is impossible to guarantee universal access and universal health coverage without a production base structured to attend the current and future social needs, involving a strong prospection effort
5. There is a strong global production and technological asymmetry that reduces variety of approaches, competition and locks the system in structural inequalities between regions, countries, territories and people,
6. As a result we observe a mismatch between health needs (a crucial SDGs goal) and the knowledge and production base that support it.

Health Economic-Industrial Complex (HEIC)

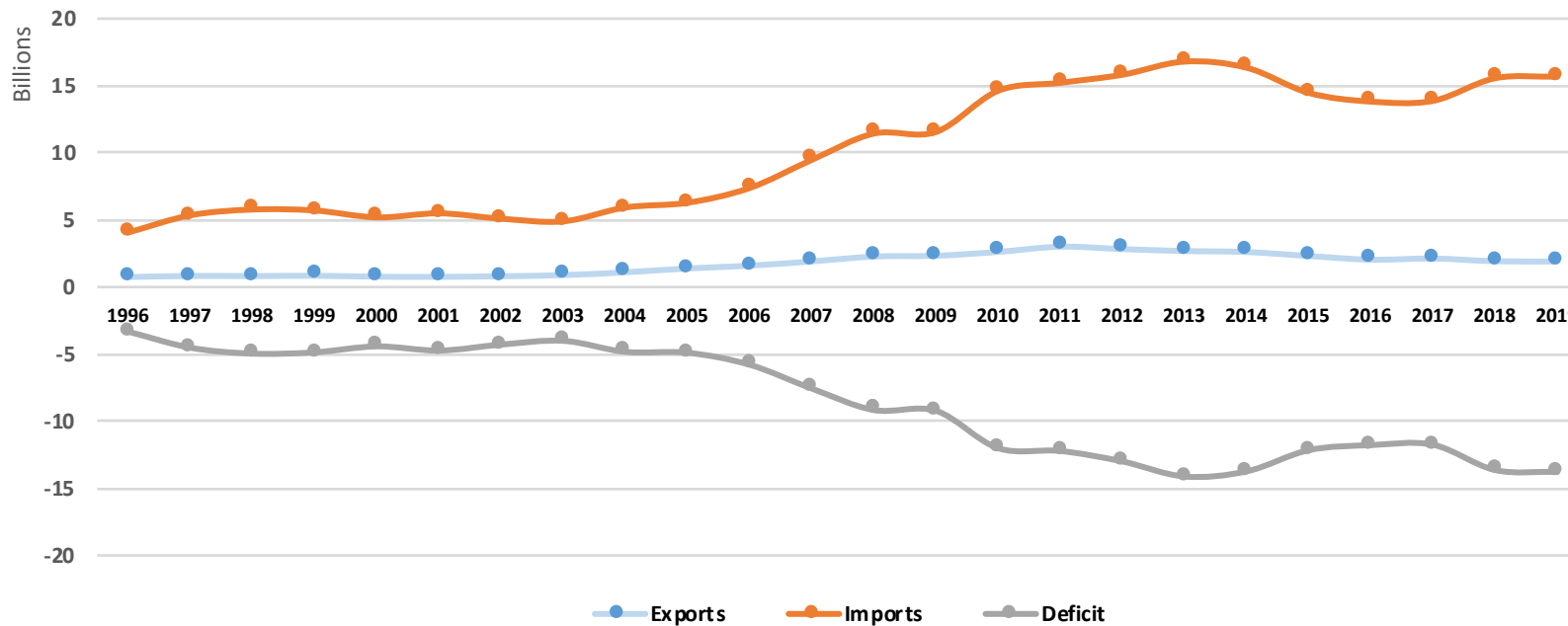
A Systemic Approach in Health Production and Technology



Brazil HEIC Trade Balance (1996/2019)

A mismatch between universal access and the production and technology system

(US\$ Billions, Updated by USA prices)



Source: Prepared by the authors based on methodology developed by the Coordination of Prospecting Activities of the Presidency / GIS / Fiocruz, based on data from Comex Stat / MDIC. Accessed in January / 2020.

Automatic Ventilators Imports

- 1999: US\$ 9,72 millions
- 2019: US\$ 52,22 millions

The Asymmetric Economic Power

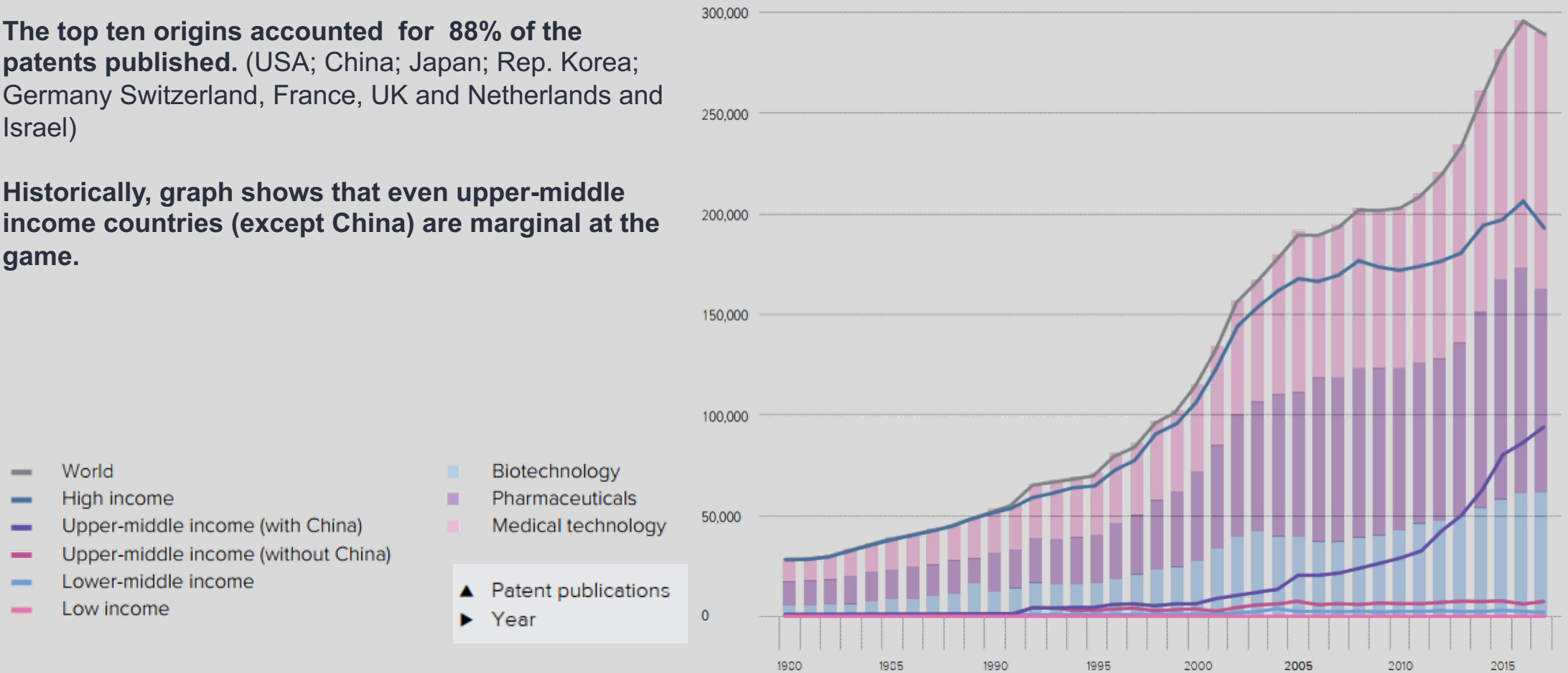
- 76 nations have limited exports of medical supplies, including some of the most developed countries

Global asymmetries: intellectual property (Health)

The current situation will become worse if nothing is done

The top ten origins accounted for 88% of the patents published. (USA; China; Japan; Rep. Korea; Germany Switzerland, France, UK and Netherlands and Israel)

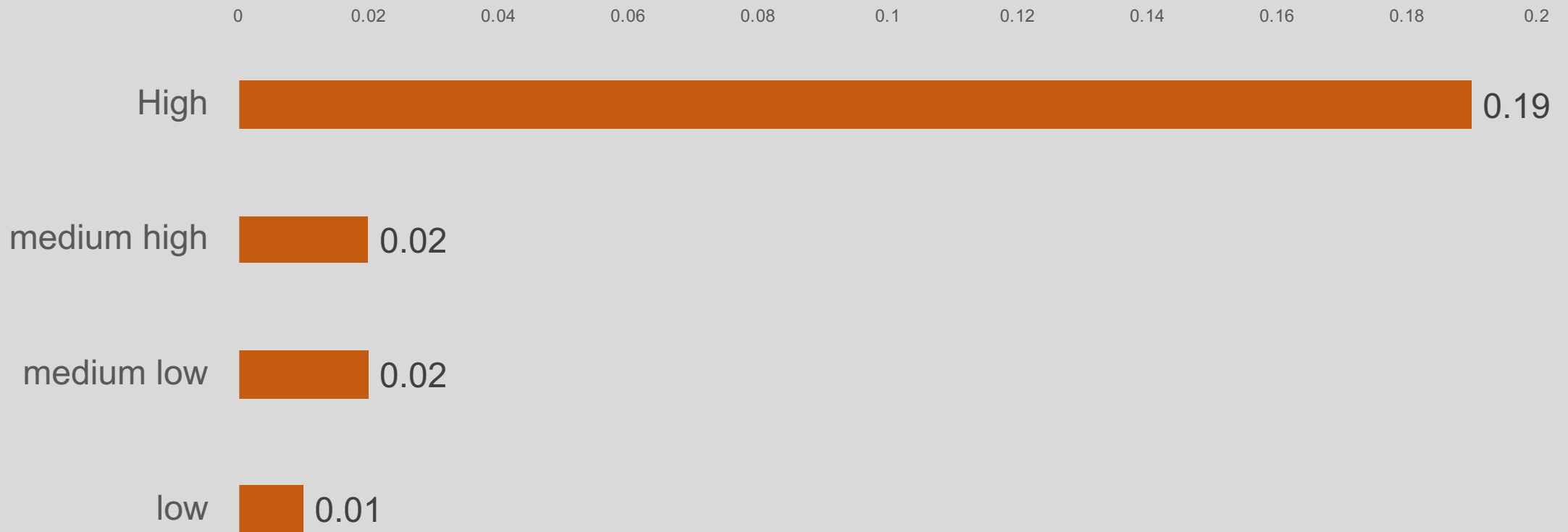
Historically, graph shows that even upper-middle income countries (except China) are marginal at the game.



Source: Global Innovation Index (2020)

Some more data....

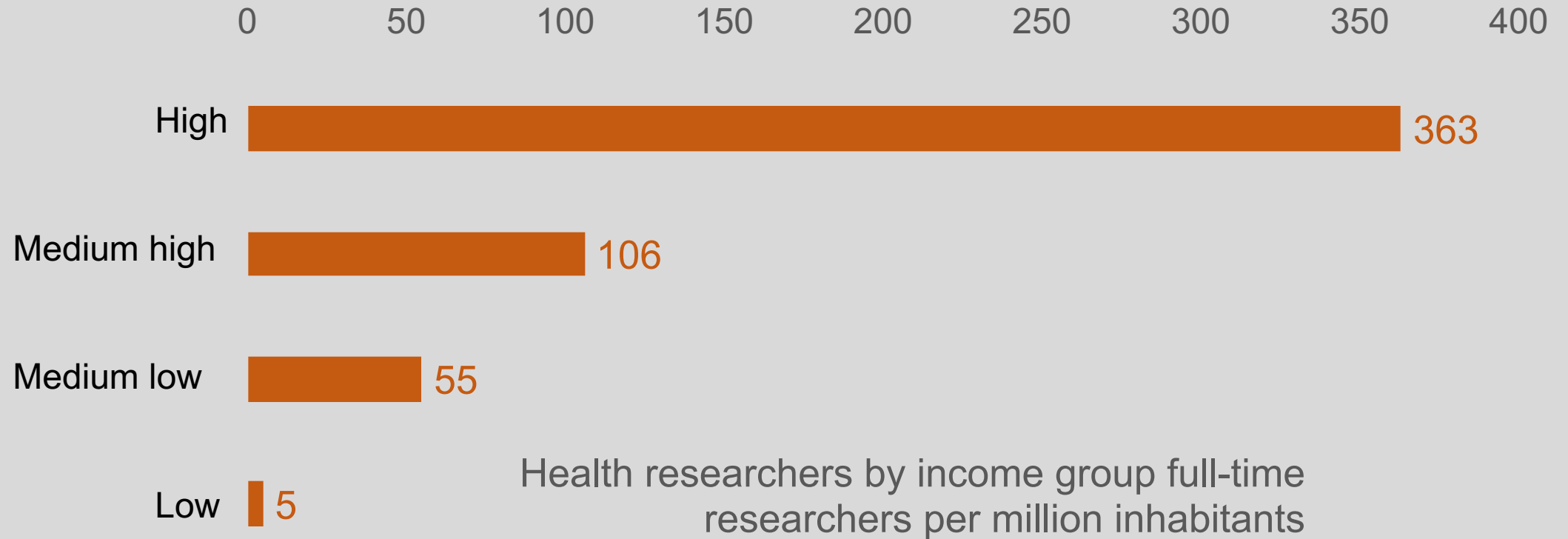
Gross R&D spending on health and medical sciences relative to GDP (%), by income groups



Source: WHO Global Health R&D Observatory (2020)

Some more data...

There are **73 times more health researchers** in high-income countries than in low-income countries

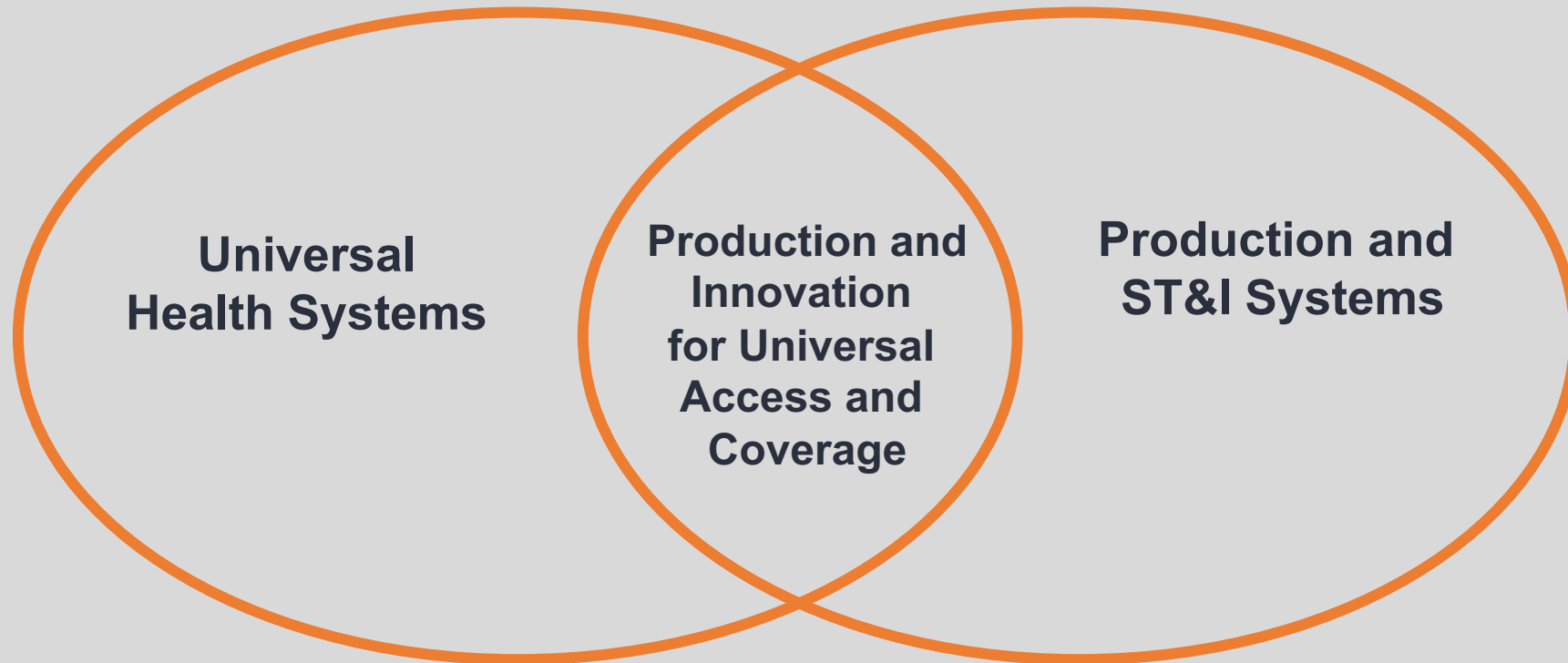


Key Points (from the problem)... to the search of a solution

1. The asymmetric, concentrated, and unequal way that health production and innovation has been done implies that the global universal access and coverage will not be achieved. The knowledge and production inequality may be the most difficult to reverse because it involves strong economic, political and mercantilist interests. Many people, countries and regions may be left behind.
2. We must congratulate the WHO for this effort to reduce access barriers for strategic industrial products for Covid-19. It must be viewed as an initial movement that is crucial, but not enough
3. The world needs a real game changer. We must reduce entry barriers and stimulate new players, companies, regions and countries, based on production, technology and knowledge cooperation in health
4. The Covid-19 pandemic (and future ones) reveals the necessity to change the intellectual property system, recovering the perspective of when the system was created (in the XIX century) in order to balance the innovators incentives with the public interest. Health in its nature is a global public good.
5. This crisis reveals that to achieve the SDGs we must have the courage to face a real structural change, matching, at the same time, the challenge of the universal health access and coverage and of economic progress in a sustainable way.
6. Health is a strategic path to protect lives, to stimulate the economy and to introduce the changes we need in our production and innovation system to meet the SDGs.

Health and Development

We need to act in both sides of the coin.... it could be an opportunity to achieve the SDGs and to face this pandemic and the global health real challenges





Thank you

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