



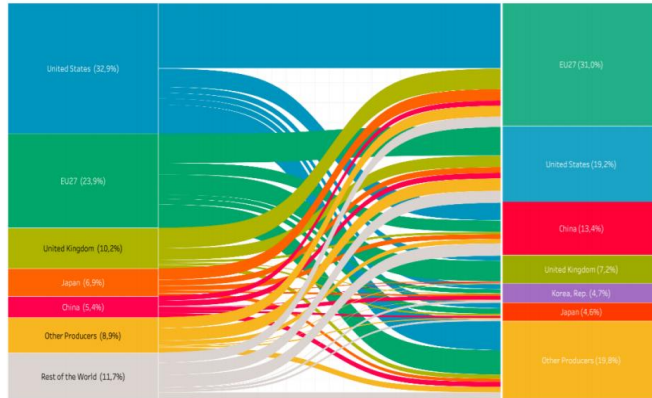
# The Importance To Develop New Technological Hubs to Face Global Crisis through International Collaboration

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September, 2021

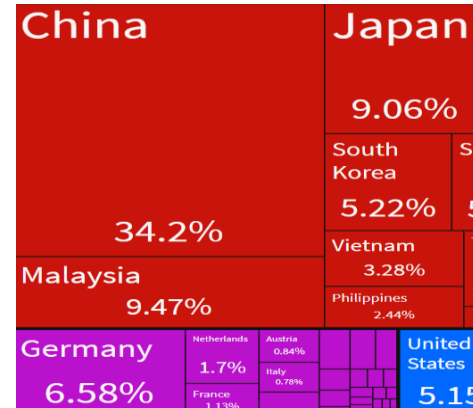
# Technological Development :

## Vaccines Club



Source: World Integrated Trade Solution (WITS) for 2017, 2018 and 2019 for the key vaccine ingredients listed in Appendix Table 1.

## Semiconductor exporters

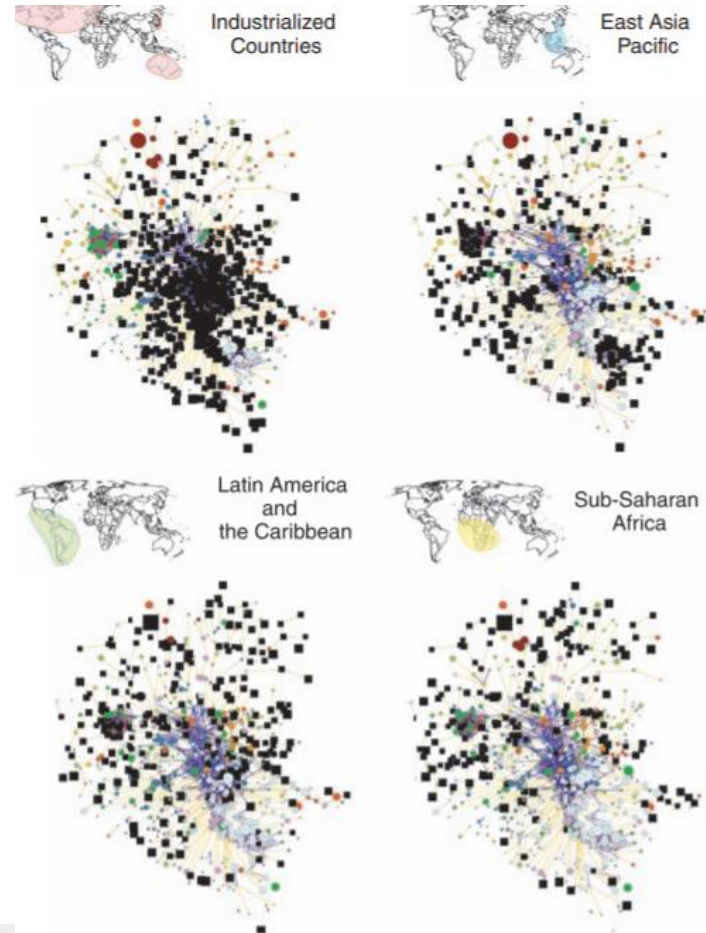


- 13 countries are concentrating the global market.
- In the semiconductor industry the situation is even worse: 80% of global market is concentrated by just 8 countries.

# Economic Complexity: How technological knowledge flows

- Technological Knowledge is concentrated in geographical hubs

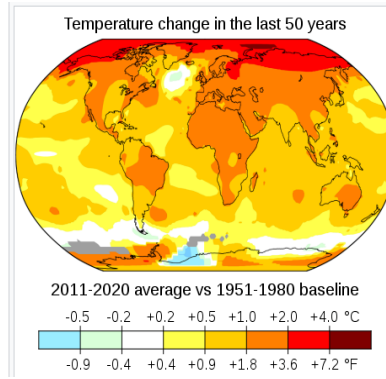
Countries trade more with those nations with whom they share history, language, and a culture. It suggests that trade is limited by information constraints.



# Technological Gap: a global crisis

Technological Gaps is not just a developing country's problem, but also an issue that impacts developed countries.

- Global value chains
- Climate change response



MC Kinsey report states that climate change effects such as hurricanes, floods and droughts will negatively impact global distribution of essential products in the near future.



# Success stories: TT as strategy. Newly industrialised countries:

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# Success stories: Newly industrialised countries

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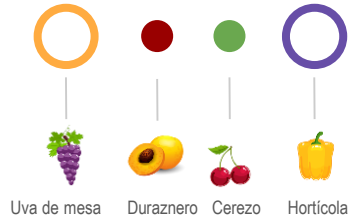
## **Indigenous capabilities:**

- Technical capacity
- Collaboration to work: science -industry

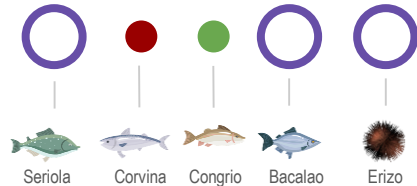
# The Chilean Innovation Ecosystem

Triple Helix: articulating through technological consortium

## Programa mejoramiento genético hortofrutícolas



## Diversificación de la Industria Acuícola



## Consortios Tecnológicos




Desarrollar en Chile la industria de la terapia celular de clase mundial



I+D que permitan mejorar servicios y productos de la industria.




I+D mercado herramientas preventivas, diagnósticas, y terapéuticas.



I+D soluciones en el área de biomedicina de salud humana de alto impacto



Obtener nuevas variedades de frutas, de alto valor comercial

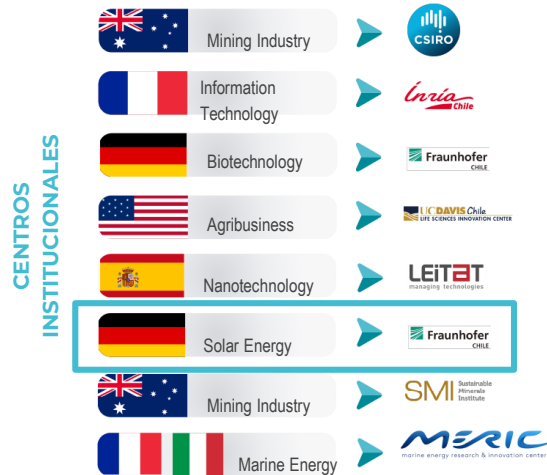


I+D centrados en mejoramientos genéticos de viñedos y sustentabilidad.

# The Chilean Innovation Ecosystem

Center of excellence attraction: technology transfer

## Centros de Excelencia Internacional



**CENTROS CORPORATIVOS**



## Centros Tecnológicos en foco prioritario





# Success stories: Newly industrialised countries

Innovation strategy: Aligning several aspects to generate impact at the local level



Source: World Bank 2017.

Note: NOI = national quality infrastructure; R&D = research and development.

# Success stories: Newly industrialised countries

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**More co-development than manufacturing agreements (moving away from “cut and paste agreements”). Because development agreements allow:**

- Co development activities to learn
- Share Foreground IP
- Own future IP

In this sense IP is a key element, not only as incentive for international corporations to be actively involved in TT process, but also as an opportunity for developing countries to create new capabilities and industries.

# International Organizations role in the Third way

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**Regional Development  
Banks**

**International Organizations could have a key role as articulators and supporters  
at the international level**

# International Organizations role in the Third way

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**International Organisations could have a key role as articulators and supporters at the international level:**

- 1) **Indigenous capabilities:** could be performed an international analysis by region
- 2) **Innovation strategy:** could support developing countries to have a long term strategy and look for country's commitment to its implementation.
- 3) **Development agreements:** training and capacity building activities to understand negotiation and management

# International Organizations role in the Third way

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**As a bottom line it is important to state that:**

*Collaboration through Intellectual property,  
is a key factor to have a more balanced and  
sustainable technological development  
worldwide*



**Thanks**  
**[cisepulvedav@gmail.com](mailto:cisepulvedav@gmail.com)**

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