

# **Session 2: Digital Transformation Implications to Global Value Chains of Japanese Firms**

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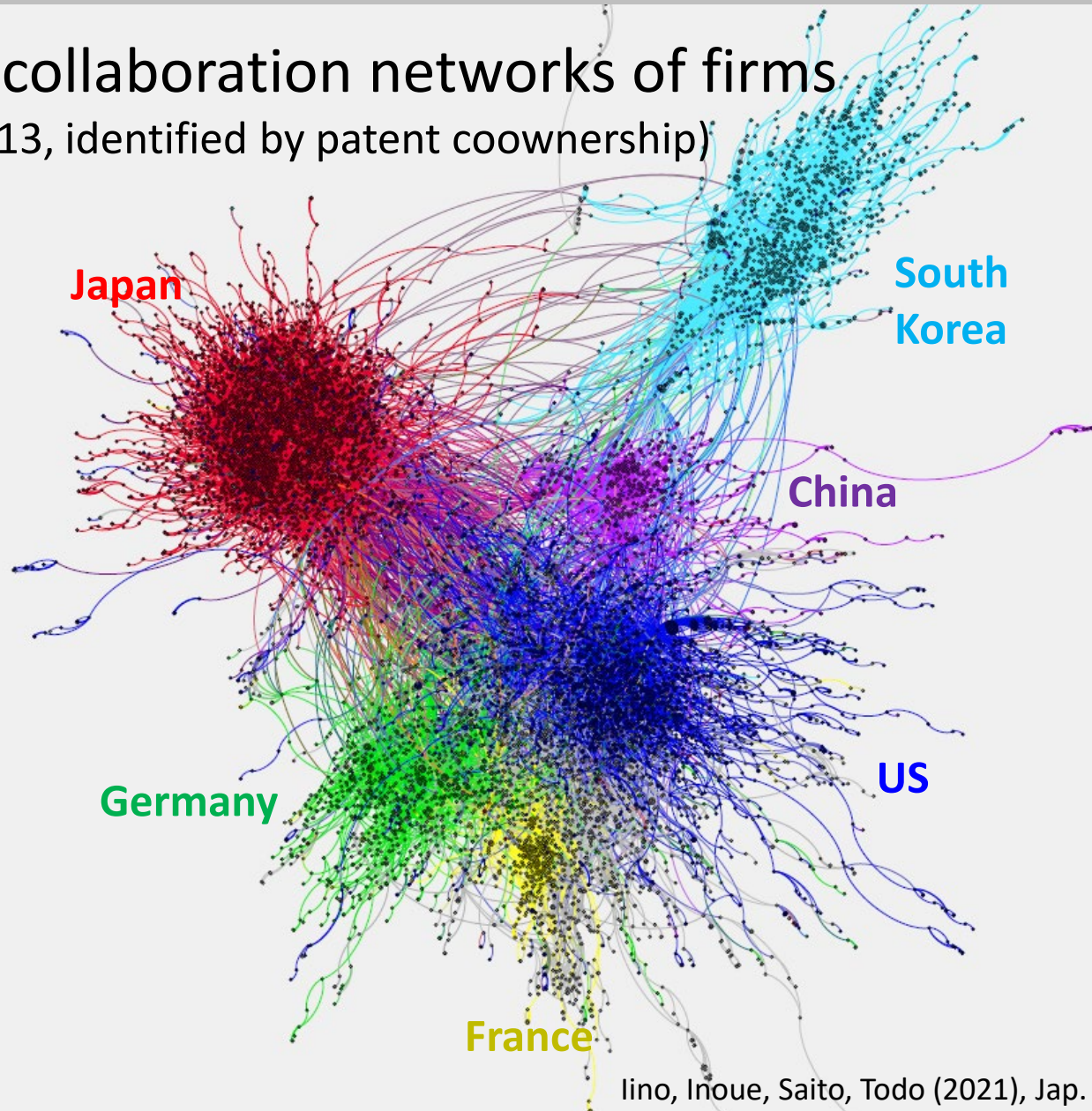
# Global Supply Chains



Kashiwagi, Todo, and Matous (2021), Rev. Int. Econ. using data from FactSet Revere

# Global Innovation Networks

Research collaboration networks of firms  
(2011-13, identified by patent coownership)



# Reconstruction of Global Value Chains

## Digital transformation

→ ↓ communication costs

→ Easier to link globally

- Digital communications are particularly easier
  - among people who are already linked
  - among people with similar cultural, ethnic, and linguistic backgrounds
- Otherwise, digital communications may not be easy.

# Face-to-face communication is still important

Morikawa (2020), RIETI Discussion Paper, No. 20-E-073.

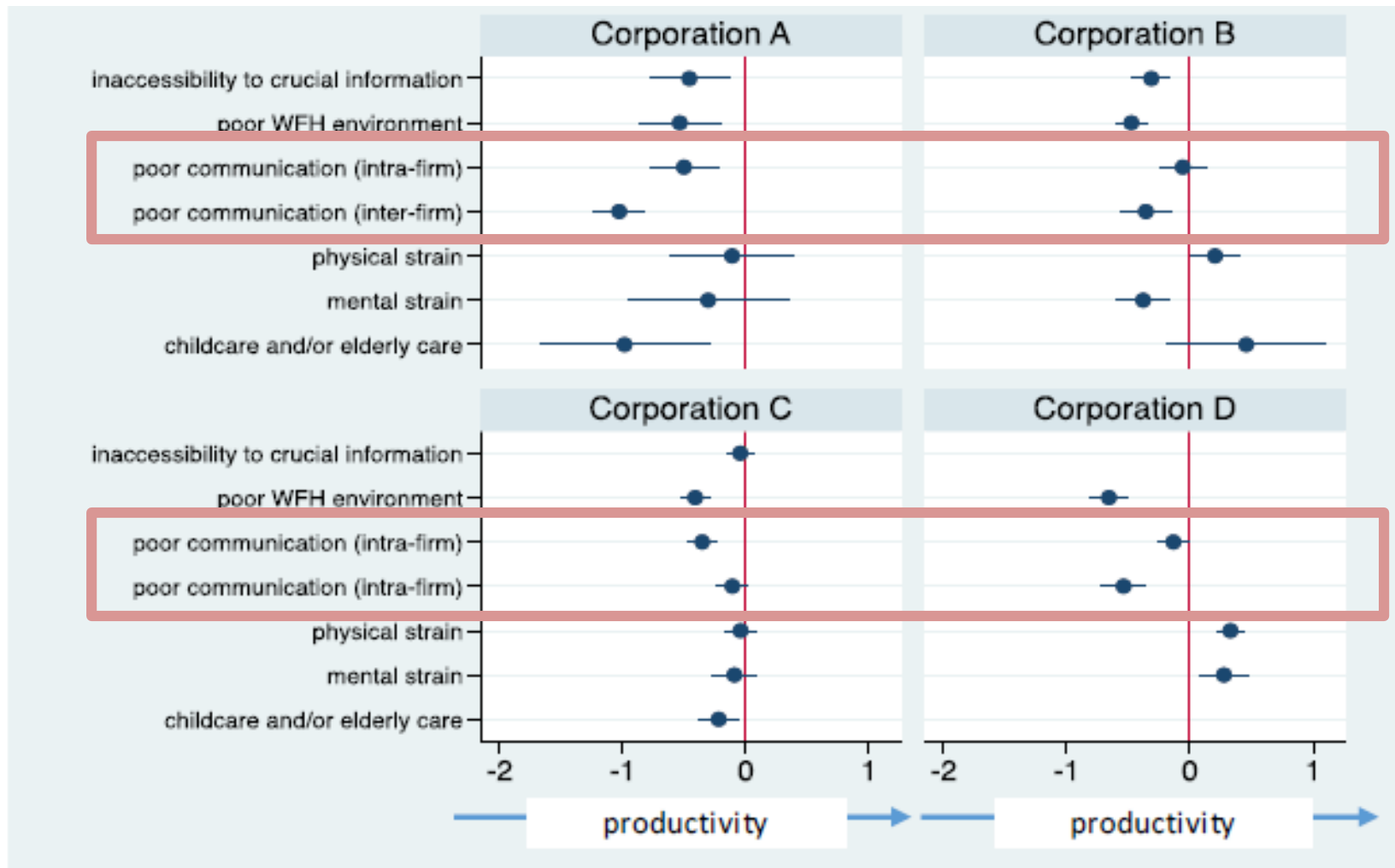
Table 9. The Factors Affecting Work from Home Productivity

Factors reducing productivity at home		
1	Poor telecommunication environment at home relative to the workplace	34.9%
2	The requirements by rules and regulations that some tasks must be conducted in the office	33.1%
3	Some tasks cannot be conducted at home even though these are not required by rules and regulations	32.5%
4	It is difficult to concentrate on job because of the presence of family members	19.9%
5	Lack of a private room specifically designed for work	15.1%
6	Loss of quick communication that is only possible through face-to-face interactions with their colleagues at the workplace	38.5%
7	Lack of pressure from the boss, colleagues, and subordinates	19.3%
8	Other reasons	10.2%

# Face-to-face communication is still important

Kuroda and Owan (2021), [https://www.rieti.go.jp/en/columns/s21\\_0013.html](https://www.rieti.go.jp/en/columns/s21_0013.html)

## Factors contributing to productivity loss due to working from home



# Challenges to Japan for expansion of global value chains in the DX era

- Currently not much globalized, particularly in innovative activities
- Background different from Europe, the US, Australia, and India that are potentially quite important to Japan



Deliberate business strategies and policies needed for expansion of **global innovative networks** of Japan

- Effectively utilize international frameworks, such as TPP and Free and Open Indo-Pacific
- Expansion of scholarships for overseas studies