Infrastructure and Firm Capacity Development

for Making better connections in factory Asia

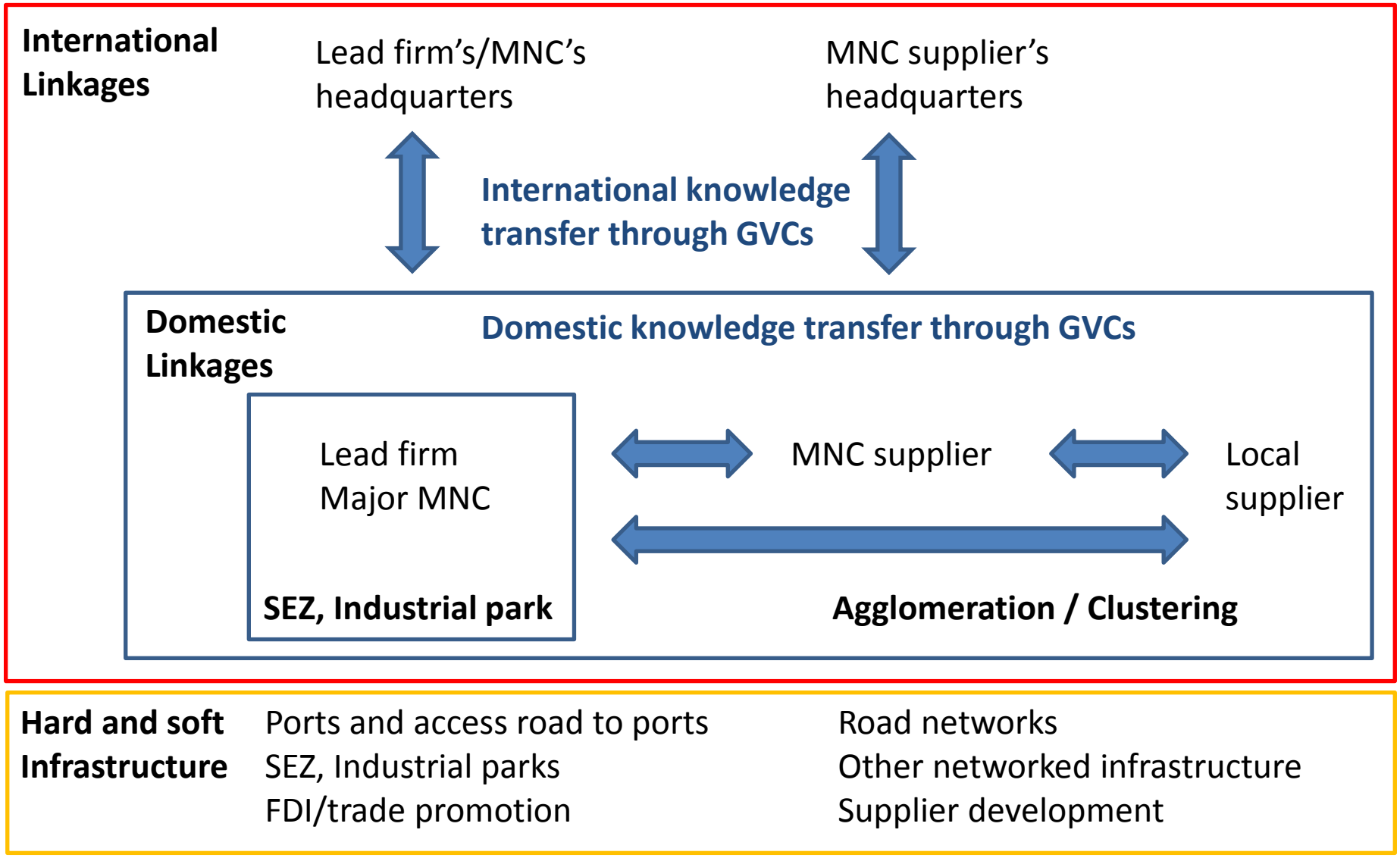
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A FDI-driven industrial development pattern in East Asia



Who make a better connections in factory Asia?

Findings from ERIA Studies on Buyer-driven Tech. Transfer



1. QC activities of a focal firm who receives technical supports from its main buyer
2. QC activities of a focal firm who provides technical supports to its main supplier
3. Distance between buyer and supplier

Firm Capacity Development through Kaizen Activities





Buyer's minimum requirements for QCD and private/public assistance

Q: Quality → Technical assistance, HRD

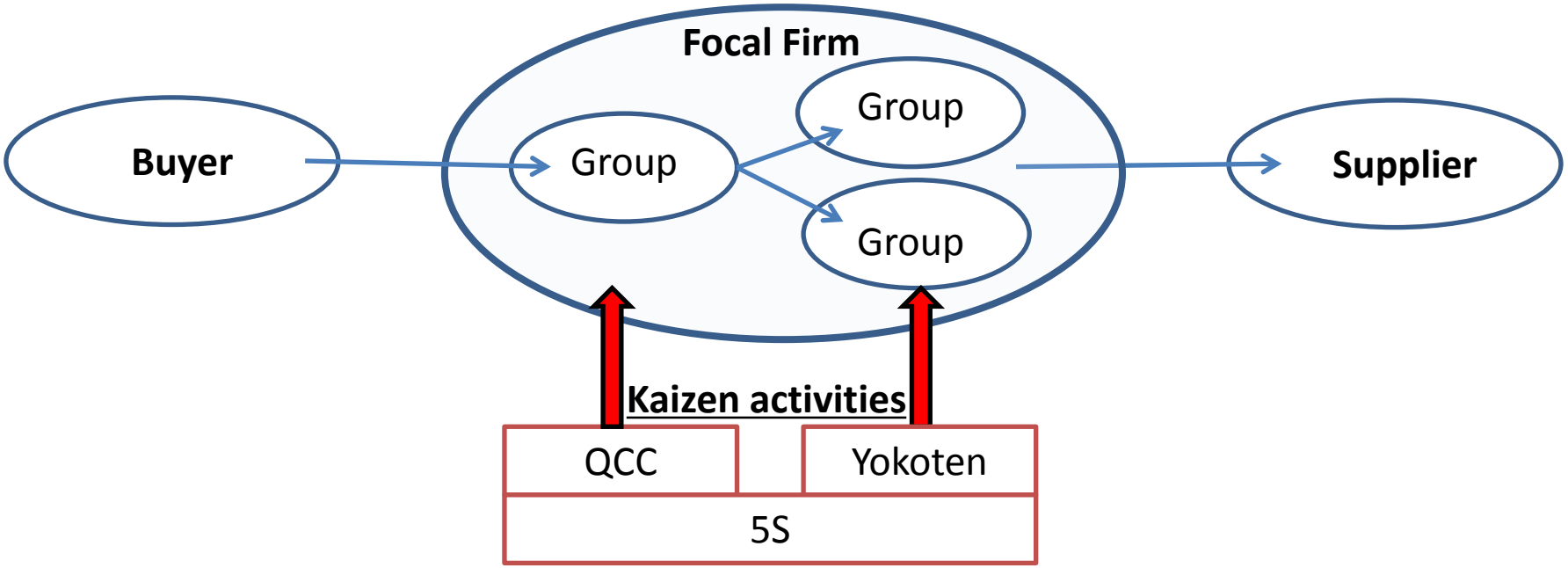
C: Cost (An advantage of firms in developing countries)

D: Delivery → Infrastructure development

Japanese TQM or KAIZEN (Continuous Improvement)

- 5S: seiri (sort), seiton (set), seiso (shine), seiketsu (standardize), and shitsuke (sustain).
  - A method for instilling workplace moral into employees.
- QCC (QC Circle): A small group activity for quality improvement
  - A tool for not only shop-floor management but also employee training on problem solving
- Yokotenkai or Yokoten: Horizontal deployment of better practices or sharing lessons from QCC activities and copying successful practices from place to place.

Kaizen Activates and Learning/Teaching Capacity

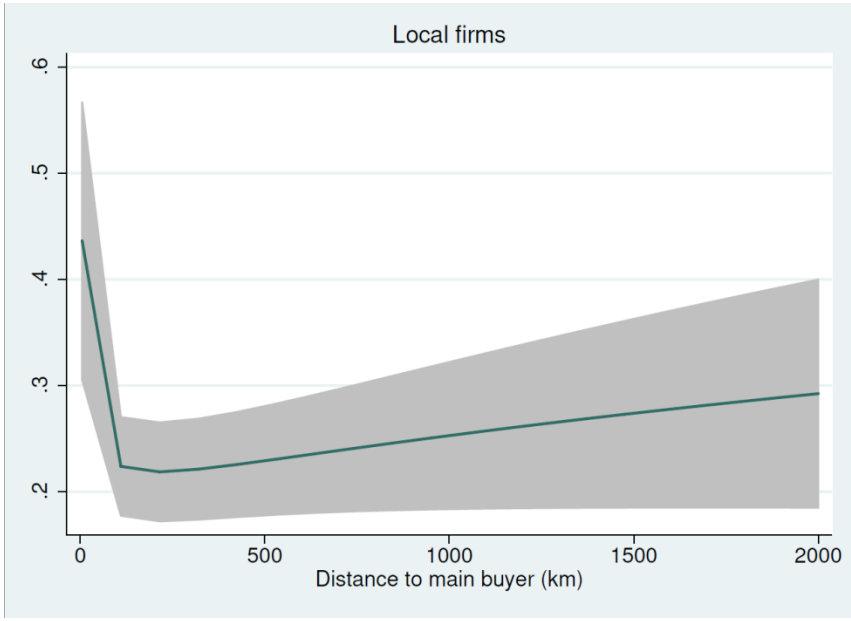


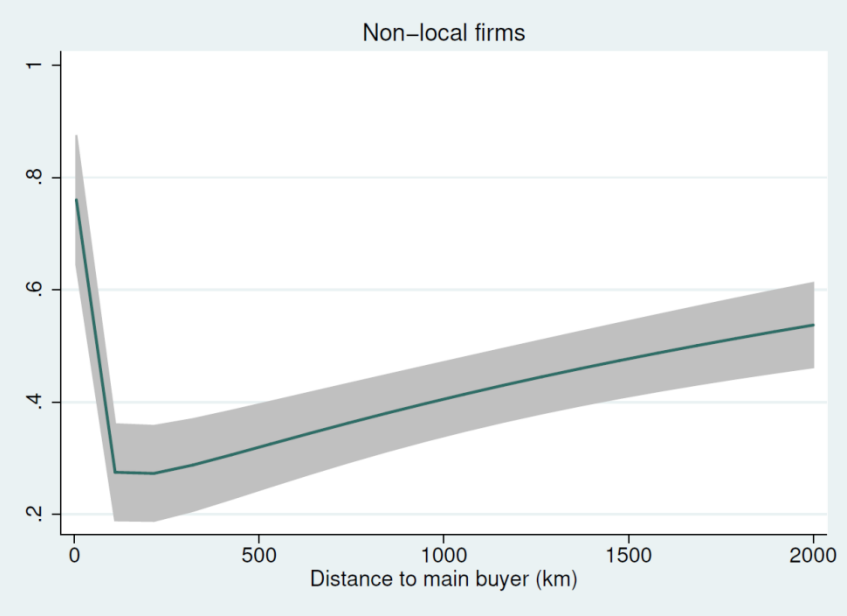
- Suppliers active in Kaizen are more likely to receive technical assistance from their buyers.
- Buyers active in QCC and Yokoten (Knowledge assimilation within the firm) are more likely to transfer knowledge to their suppliers.

(Note: for more details, see Machikita, Tsuji, Ueki (2016) Journal of Business Research, 69)

Distance to Buyers Providing Technical Assistance

Plotting average adjusted prediction of distance (km) to main buyer on the receiving probability of buyer-provided training with 95% confidence intervals





Source: Kimura, Machikita, Ueki (2015), ERIA DP-2015-40.

Business Environments Influential to Firm's Investment Decision in Vietnam

Decision to choose Vietnam as a factory location at the time when established?	%	Decision to expand/upgrade operations in the current factory location	%
Size of the domestic market	15.3	Size of the domestic market	24.9
Availability of land	13.4	Tax incentives	18.5
Availability of low-cost labor	12.1	Availability of land	12.5
Availability of natural resource inputs	8.3	Proximity to customers	9.6
Tax incentives	8.0	Transport infrastructure	7.0
Transport infrastructure	7.4	Request by customers	4.5
Concentration of supporting industries	5.8	Availability of low-cost labor	4.2
Legal and regulatory infrastructure	4.8	Service quality of industrial estate	3.2
Availability of skilled labor/expert	4.2	Availability of natural resource inputs	2.2
Proximity to customers	4.2	Electricity, water, other utilities	1.9

N=313.

Note: Firms in Vietnam specified the most important factor to locate and expand/upgrade their operations in Vietnam by choosing one item from 24 items.

Source: ERIA Survey in FY2014 (2014-2015).

Conditions for Making Connections with GVCs

Development Stage	Hard and Soft Infrastructure	Firm Capacity Building

Participation in GVCs	• Infrastructure for freer mobility of goods and capital
	• Point-by-point, point-to-point infrastructure
	  ➢ Ports
	  ➢ Access to ports
	  ➢ SEZs, Industrial parks
	• FDI and trade promotion
	• Basic education
		• QCD+ES
		• International knowledge transfer within a firm or between MNCs

Interactions within GVCs	• Infrastructure for freer mobility of people and knowledge
	• Networked infrastructure
	• Trade and transportation facilitation
	• Supplier development program
		• Kaizen
		  ➢ Learning
		  ➢ Teaching
		• Domestic knowledge transfer between buyers and suppliers

Thank you very much for your attention.

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