Chapter 5

Framework of the ERIA Firm Survey

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Chapter 5

FRAMEWORK OF THE ERIA FIRM SURVEY

Ikuo Kuroiwa

ABSTRACT

This chapter introduces the analytical framework of the ERIA firm survey. The ERIA firm survey aims to indicate bottlenecks faced by less developed countries in attracting foreign direct investment (FDI), participating in production networks, and forming industrial clusters. The chapter also includes the survey questionnaire in the appendix.

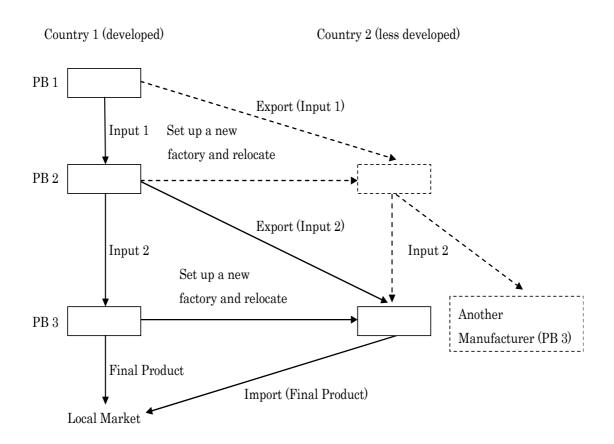
INTRODUCTION

Leading Southeast Asian economies have achieved rapid growth by participating in production networks organized by multinational enterprises (MNEs). It is thus crucial for CLMV to improve investment climate and join the production networks of MNEs. Service link costs need to be reduced substantially to make production fragmentation economically feasible. The discussion elaborates on how these conditions are satisfied and how they are organized in the framework of the ERIA firm survey.

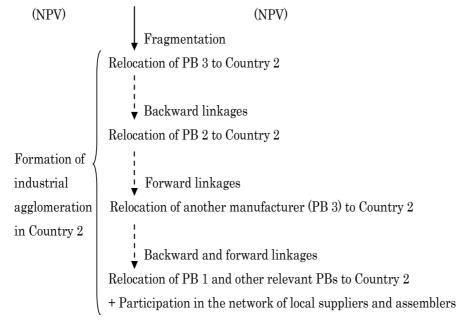
1. PARTICIPATION IN PRODUCTION NETWORKS

Firms try to organize production activities efficiently to minimize production costs. To achieve this objective, comparative advantage of each production site should be fully utilized. Figure 1 illustrates a case of a firm with three production blocks—PB 1 (upstream), PB 2 (midstream), and PB 3 (downstream). Then it is supposed that PB 3 is the most labor intensive among the three. All of these blocks are initially located in a relatively industrialized area in Country 1—such as Bangkok metropolitan area in Thailand.

Figure 1: Fragmentation and Formation of Industrial Agglomeration



Saving in Labor Costs > Additional costs in Business Setup + Business Operation + Logistics



However, due to a sharp increase in wages, the firm is now considering whether it shifting PB 3 to a less industrialized area in Country 2— such as Vientiane area in Lao PDR— is a better option. In this setting, below is a comparison of costs and benefits with and without relocation of PB 3.

(1) Benefits from relocation

The firm can save significant labor costs by shifting PB 3 to Country 2. Labor costs in Thailand, for example, are 4.8-8.0 times higher than Lao PDR (Suzuki 2009)¹. Thus, the firm has a strong incentive to shift a labor intensive activity to a low-wage country.

(2) Costs of relocation

There are three kinds of additional costs incurred when production fragmentation occurs.

(a) *Business Setup Costs* are incurred when the firm set up a new factory for PB 3 in Country 2. For example, the firm needs to collect information on the regulatory framework and legal procedures, obtain licenses and permits in the host country. These costs will be reduced substantially if the government provides efficient services for investors.

(b) Additional *Business Operation Costs* are incurred when Country 2 (less developed country) has less favorable business environment than Country 1 (developed country)². For example, infrastructure services such as utilities (electricity, water, and gas supply), transportation and communication services are less efficient and often more expensive in less developed countries. Institutions and governance are commonly weak in these countries, so that the firm faces serious uncertainty in business. Also crucially important is the availability of qualified workforce, like engineers and managers, but less developed

¹ Suzuki, Motoyoshi (2009). "Industrialization strategy of Laos: agglomeration and fragmentation". In *Plugging into production networks: industrialization strategy in less developed Southeast Asian countries*, ed. Ikuo Kuroiwa. Singapore: Institute of Southeast Asian Studies, forthcoming.

² If less developed countries offer better business environment than developed countries, additional business operation costs become negative. However, this is not the case in many developing countries.

countries typically lack these resources. On the other hand, if less developed countries offer attractive investment incentives, such as generous tax cuts, it will offset additional business operation costs to a certain degree.

(c) Service Link Costs or Logistics Costs are incurred when intermediate inputs (Input 2 in the case of Figure 1) and final products are carried back and forth between the two countries after the relocation of PB 3. Logistics Costs also include time cost for custom procedures. Moreover, communication costs are incurred to coordinate the production activities internationally. From a simple comparison of the costs and benefits, the firm will decide to shift PB 3 to Country 2, if the following condition is satisfied:

Net present value (NPV) of the benefits (= Savings in Labor Costs) exceeds that of the costs (= additional costs in Business Setup + Business Operation + Logistics).

In the above equation, since labor costs are mostly determined in the market (except for setting of minimum wage rates by the government), the influence of the government on the benefit side is limited. On the other hand, the government can influence the costs significantly. For example, the Business Setup Costs will be reduced substantially if the government provides an efficient one-stop service for investors. Special economic zones (SEZs) are especially instrumental to reduce these costs altogether, because they can provide an efficient one stop service, excellent infrastructure services, generous tax incentives, efficient custom procedures, and so on in a geographically specified area.

The ERIA questionnaire survey, especially questions in Sections 1, 2, and 3 are respectively relevant to the Business Setup Costs, Business Operation Costs, and Logistics Costs (see the appendix of this chapter). The CLMV countries can increase a possibility of attracting FDI and participating in production networks by taking appropriate measures to improve business environment and reduce these costs.

2. FORMATION OF INDUSTRIAL AGGLOMERATION

As discussed in Chapter 1, if the industry has weak agglomeration economies, production blocks are dispersed geographically. For example, labor-intensive activities such as garment sewing are constantly relocated to low-wage countries. Although such activities are relatively easy to attract, they are footloose and will leave the host country easily once wages and rents start to rise. To sustain economic growth, it is critical to attract the industries that exhibit some form of agglomeration economies.

Attracting these industries is more difficult due to the centripetal force of agglomeration economies and higher technological capabilities required for them. However, once they are successfully relocated, they will give significant impacts on the local economy. To illustrate this process, let us go back to Figure 1. Figure 1 shows that after the relocation of PB 3, PB 2 initially stays in Country 1, and Input 2 is exported to Country 2 to be used as an input for PB 3. However, as production of PB 3 increases, it is likely to be less costly to set up a new factory and relocate PB 2 to Country 2, because saving in Logistics Costs would exceed additional Setup Costs incurred by relocation. This is especially so if PB 3 has strong backward linkages to PB 2. On the other hand, after the relocation of PB 2, Input 2 becomes available locally in Country 2, and it is likely that PB 3 of another manufacturer would be attracted to Country 2, especially if PB 2 has strong forward linkages to PB 3. Furthermore, there is a possibility that PB 1 and other relevant PBs would be attracted to Country 2 via backward and forward linkages of the existing PBs in Country 2.

The above process illustrates a simple example of concentrated dispersion (Figure 2 in Chapter 1). It also illustrates how the anchor firms, such as Toyota and Canon, attract suppliers from abroad and form industrial clusters (see the flowchart approach in Chapter 4). In addition, if local suppliers have enough technological capabilities, they will participate in production networks and obtain not only market access but also technological transfer from MNEs.

October 2008

ERIA QUESTIONNAIRE SURVEY

Background

The Economic Research Institute for ASEAN and East Asia (ERIA) is a new research institute established on 3 June 2008 among the governments of 16 countries: Australia, Brunei, Cambodia, China, India, Indonesia, Japan, Korea, Laos, Malaysia, Myanmar, New Zealand, Philippines, Singapore, Thailand and Vietnam. ERIA undertakes policy analyses and policy recommendations for leaders and ministers in the region. It serves as a tripartite-type forum for policy dialogue and interactions among policymakers, researchers, and business/civil community to improve policy research capacities especially in the less developed countries.

In FY 2008, ERIA conducted several research projects. One of them is "Development Strategy for CLMV countries". In this project, the focus is on the development of the manufacturing sector in Cambodia, Laos, Myanmar, and Vietnam.

The survey questionnaire is one of the most important tools to derive valuable policy suggestions for CLMV. Managers of businesses operating in CLMV are the respondents of this survey who will be asked for opinions about the business environment. This questionnaire will help us understand the needs of companies in CLMV.

Objectives

- 1. To recommend policy measures for CLMV to attract FDI and to participate in production networks in East Asia.
- 2. To recommend policy measures to utilize effectively economic corridors and SEZs.
- 3. To recommend appropriate timing and sequence of policy measures to develop industrial clusters.

Methodology

The survey will be administered following the processes below:

- 1. Interview at least 60 firms engaged in international business transactions (including MNEs).
- 2. Interview owners or those who are responsible for the management of companies or establishments.
- 3. MNEs and local firms located inside the SEZ or Industrial Estate should be given priority.
- 4. This study focuses on three types of industrial location—a metropolitan area, transport hub, and border area. Each participating institute is expected to select at least one survey site for each type of industrial location.

Please note that the result of the survey will be used for general analysis purposes only. All private information of your company will be kept confidential and will not have any negative influence on your business.

QUESTIONNAIRE

Name of Respondent/Title	Q're. No.
Company Name Head Office Address	Country Code. 1 Cambodia 2 Laos 3 Myanmar 4 Vietnam
Phone Number	
Fax Number	
Email	No. of Contacts
Factory Name Address	
Phone Number	
Fax Number	
Email	No. of Contacts
Major Product (1)	Brand Name (1)
Major Product (2)	Brand Name (2)
Major Product (3)	Brand Name (3)
Interviewed Date Day Monday Tuesday Wednesday Thursday Friday Saturday Saturday Sunday End Time	Interviewer Name Number Initial & No Date Initial & No Date Supervisor Name Number Initial & No Date Initial & No Date Initial & No Date Initial & No Date
	1. Witness 2. Call back Date

Profile of the Company (or Establishment)

1.	When was your company established? (Year)	

2.	What is your capital structure? (SA)	Code
	100% Local	1
	100% Foreign	2
	Joint Venture	3
	(a) In case of the joint venture, what is the percentage of foreign capital?	%
	(b) If you checked 100% Foreign or Joint Venture, what is the nationality of the foreign investor?	

3.	Size of your company		
	(a) Number of Full-time Employees:		
	(b) Annual Output (in quantity):	(Qty.)	(Unit)
		Local Currency	<u>US\$</u>
	(c) Total Asset (Paid-up Capital):		
	(d) Annual Sales:		
	(e) Annual Profit (if available):		

4.	Where is your factory located? (SA)	Code
	Inside the Industrial Estate / Zone	1
	Inside the SEZ (or EPZ)	2
	Outside the Industrial Estate or the SEZ	3
	Others (please specify:)	4

5.	What is your main business activity? (Please circle your answer.) (MA)	Code
	Material Supplier	1
	Part / Component Supplier	2
	Assembler	3
	Distributor	4
	Storage Handler	5
	Others (please specify:)	6

Section 1: Business Setup

6. Please evaluate your environment related to the business setup (Question A through E) on a five-point scale.

If your answer is 1 or 2, please specify the reason(s).

		Very Poor	Poor	Fair	Good	Excellent	Reason
A	Collecting information on the business environment – information necessary to make an objective decision on investment	1	2	3	4	5	
В	Collecting information on the regulatory framework and legal procedures for setting up the business	1	2	3	4	5	
С	Obtaining licenses and permits	1	2	3	4	5	
D	Effectiveness of one-stop service (if any)	1	2	3	4	5	
E	Investment regulation	1	2	3	4	5	

7.	If you have faced any other obstacles in setting up the business, please specify.	

Section 2: Business Operation

8. Please evaluate your environment related to the business operation (Question A through CC) on a five-point scale.

If your answer is 1 or 2, please specify the reason(s).

	il your answer is 1 or 2, prease specify the reason(s).						
		Very Poor	Poor	Fair	Good	Excellent	Reason
А	- Macro economy -	1	2	3	4	5	
	Macroeconomic stability (low inflation, stable exchange rate, etc.)						
В	Governance Crime, theft, and disorder	1	2	3	4	5	
С	Quality of policy formulation and implementation	1	2	3	4	5	
D	Quality of government services	1	2	3	4	5	
E	Quality of the legal system	1	2	3	4	5	
F	Corruption	1	2	3	4	5	
G	- Regulatory framework - Business licensing and operating permits	1	2	3	4	5	
I	Tax rates	1	2	3	4	5	
I	Tax administration	1	2	3	4	5	
J	Labor regulation	1	2	3	4	5	
К	Land regulation	1	2	3	4	5	
L	Finance regulation	1	2	3	4	5	
М	Intellectual property right (IPR) protection	1	2	3	4	5	
		Very Poor	Poor	Fair	Good	Excellent	Reason

N	- Infrastructure - Electricity	1	2	3	4	5	
0	Water	1	2	3	4	5	
Р	Gas/Fuel	1	2	3	4	5	
Q	Transportation	1	2	3	4	5	
R	Telecommunication	1	2	3	4	5	
S	Industrial estates	1	2	3	4	5	
Т	Accommodation for foreigners	1	2	3	4	5	
U	- Labor - Quality of workers	1	2	3	4	5	
V	Quality of middle management	1	2	3	4	5	
W	Quality of engineers	1	2	3	4	5	
Х	Labor cost	1	2	3	4	5	
Υ	Easiness of recruitment of workers	1	2	3	4	5	
Z	Labor turnover (frequency of movement of workers in and out of a company)	1	2	3	4	5	
AA	Labor relation (labor strikes, etc.)	1	2	3	4	5	
ВВ	- Land – Office rentals / land prices	1	2	3	4	5	
СС	- Finance - Access to loan	1	2	3	4	5	

9.	Do you have any foreign workers in your company?

Α	Number:									
	Nationality:									
	Do you have any foreign middle management staff in your company?									
В	Number:									
	Nationality:									
	Do you have any foreign enginee	rs in your company?								
С	Number:									
	Nationality:									
10.	What is the educational backgrou	ınd of your workers, m	iddle management	, and engineers?						
		Worker	Middle management	Engineer						
Α	No formal schooling	1%	2%	3%						
В	Elementary school	1%	2%	3%						
С	Middle-high school	1%	2%	3%						
D	High school	1%	2%	3%						
Е	Technical/vocational school	1%	2%	3%						
F	College/university (BA)	1%	2%	3%						
G	Graduate school (MA/PhD)	1%	2%	3%						
			Ī	T						
11.	How much do you pay for allowances) monthly? (Average Salary)		(Local Currency)	(US\$)						
	(a) Worker									
	(b) Middle Management									
	(c) Engineer									
	What percentage of your workers ch	panges their ichs month								
12.	Monthly labor turnover ratio (%):	%								

Do you think that the current investment incentives are attractive enough to attract investors?

Please evaluate the current investment incentives (Question A through H) on a five-point scale.

If your answer is 1 or 2, please specify the reason(s).

			Poor	Fair	Good	Excellent	Reason
Α	Tax incentive (e.g. tax holiday)	1	2	3	4	5	
В	B Subsidies		2	3	4	5	
С	C Rent-free or subsidized land		2	3	4	5	
D	D Access to low-cost financing						
Е	E Exemption from trade restrictions		2	3	4	5	
F	F Exemption from remittance restrictions		2	3	4	5	
G	Exemption from foreign ownership restrictions	1	2	3	4	5	
Н	Prioritized supply of utility services such as electricity, telecommunication	1	2	3	4	5	

|--|

Section 3: Logistics

	ion or Logicaloc							
15.	What are your main products and market share distributions?							
	Product name	Domestic	Export Co	untry 1	Export Co	ountry 2		
		Market	Name	%	Name	%		
Α	1.	2%	3.	4%	5.	6%		
В	1.	2%	3.	4%	5.	6%		
С	1.	2%	3.	4%	5.	6%		

16.	What are your main materials, parts, and components and sources?						
	Materials / parts	Domestic	Domestic Import Country 1		Import Country 2		
	name	Market	Name	%	Name	%	
Α	1.	2%	3.	4%	5.	6%	
В	1.	2%	3.	4%	5.	6%	
С	1.	2%	3.	4%	5.	6%	

17. Please evaluate your environment related the logistics (Question A through Q) on a five-point scale.

If your answer is 1 or 2, please specify the reason(s).

		Very Poor	Poor	Fair	Good	Excellent	Reason
Α	- Domestic market -	1	2	3	4	5	
	Domestic market size						
В	Purchasing power of local consumers	1	2	3	4	5	
С	Smuggling control	1	2	3	4	5	
D	- Foreign market -	1	2	3	4	5	
	Procedures for export						
E	Export tax (leave it blank if there is no export tax)	1	2	3	4	5	
F	Rules of origin for GSP	1	2	3	4	5	
G	Uncertainty of the GSP status In future	1	2	3	4	5	

Н	- Domestic Procurement - Collecting information about	1	2	3	4	5	
	local suppliers						
I	Quality of local supplier base	1	2	3	4	5	
J	Access to capable international suppliers	1	2	3	4	5	
K	- Foreign Procurement -	1	2	3	4	5	
	Procedures for import of raw materials/ parts and components						
L	Custom clearance	1	2	3	4	5	
М	Tariff barrier	1	2	3	4	5	
N	Non-tariff barrier	1	2	3	4	5	
0	Drawbacks of import duty and value added tax	1	2	3	4	5	
Р	Trade regulation	1	2	З	4	5	
Q	Foreign exchange regulation	1	2	3	4	5	
			1				

18.	How do you import your materials, parts, and components from abroad? Is it by land, sea, or air transport? Please circle your answer.						
Α	1. Land	2. Sea / River	3. Air				
	Which highway, rail, port or airp	ort do you use mostly?					
	1.1 Highway / Rail name						
	2.1 Port name						
	3.1 Airport name						
	How do you export your products to abroad? Is it by land, sea, or air transport? Please circle your answer.						
В	1. Land	2. Sea / River	3. Air				
	Which highway, rail, port or airport do you use mostly?						
	1.1 Highway / Rail name						
	2.1 Port name						

3.1 Airport name

19.	19. How do you evaluate the cost competitiveness of each mode of transportation and communication?						
		Very Poor	Poor	Fair	Good	Excellent	
Α	Land transport	1	2	3	4	5	
В	Sea / River transport	1	2	3	4	5	
С	Air transport	1	2	3	4	5	
D	Communication	1	2	3	4	5	

20.	How do you evaluate the efficiency of each mode of transportation and communication?						
		Very Poor	Poor	Fair	Good	Excellent	
Α	Land transport	1	2	3	4	5	
В	Sea / River transport	1	2	3	4	5	
С	Air transport	1	2	3	4	5	
D	Communication	1	2	3	4	5	

21.	How do you evaluate the Reliability of each mode of transportation and communication?							
		Very Poor	Poor	Fair	Good	Excellent		
Α	Land transport	1	2	3	4	5		
В	Sea / River transport	1	2	3	4	5		
С	Air transport	1	2	3	4	5		
D	Communication	1	2	3	4	5		

22.	22. When you export/import directly, what was the average and the longest number of days in 2008 that it took from the time your goods arrived in their point of entry/exit (e.g., port, airport) until the time you clear/claim them at customs?					
		days on average	days of the longest time in 2008			
Α	Export	1.	2.			
В	Import	1. 2.				

Section 4: Future Development

23.	Do you think that the establishment (or improvement) of Special Economic Zones (SEZ) / Industrial Zone will be effective or necessary to improve the investment environment in this country?	Code
	Yes	1
	No	2
	No idea / do not know	3

24.	If your answer is 'yes', please choose the reason(s) from below: Please circle the number.
	(1) One-stop service
	(2) Faster procedures for starting a business
	(3) Better custom clearance
	(4) Better infrastructure
	(5) Other reason (please specify):

25.	If your answer is 'No', please specify the reason(s).
	(1)
	(2)
	(3)
	(4)
	(5)

26.	What do you think of the future of your industry (in this country)? (SA)	Code
	Very Poor	1
	Poor	2
	Fair	3
	Good	4
	Excellent	5

27.	Please specify the reason(s) for your opinion.
	(1)
	(2)
	(3)
	(4)
	(5)

Thank you for your cooperation