

A Study of the strategic model of overseas infrastructure system exports to Vietnam in Japan

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Abstract

Labor costs are cheaper talent is rich in Vietnam. And growth potential of the local market can be expected. But social infrastructure underdeveloped is the biggest challenge. There is a strong technical force city rail, water treatment, such as road traffic management control tower Japanese companies. For the above reasons, the Japanese government has been set as a national strategy to "infrastructure system exports packaged" to Vietnam. In this paper, by using the "framework of the institutional vacuum theory" Khanna and Palepu (1997), consider the infrastructure export model of Japanese companies.

1. Introduction

It has expanded the market of the world .The international competition is heating up. Environment surrounding infrastructure related industries has changed greatly for it. Be propelled by a public-private partnership " package type export infrastructure " aggressively is a problem in Japan . Vietnam and Japan have a deep connection from 1,000 years ago.Vietnam 's economy has maintained a high growth close to about 7 percent over the past decade.This factor is the increased investment and increased consumption . The elderly population is less characteristic of the population of Vietnam becomes a labor of possible late teens is increasing at double-digit every year. The average age of Vietnamese people is about 27 years old . As a result, domestic consumption is very strong . This is similar to the high-growth period of Japan. In addition , the characteristics of Vietnam , is that society and politics are stable and that the labor force hardworking rich can be secured easily . Foreign companies have a lot of investment activity .

From the above , in recent years, social infrastructure , development and has been developed by local companies and foreign companies and Japanese companies in Vietnam.

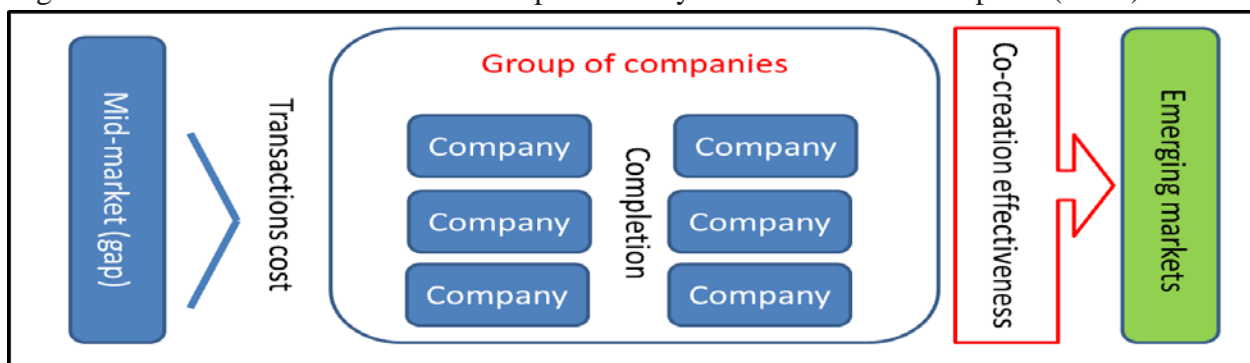
The paper, by using the "framework of the institutional vaccum theory" Khanna and Palepu (1997), consider the infrastructure export model of Japanese companies. I make a case study of three concrete. ① Exclusive residential area development (Ho Chi Minh City suburb) ② Ho Chi Minh City Urban Railway Construction Project, (Zozao from Ho Chi Minh City) ③ North-South highway construction projects.

2. Meaning and purpose of this study

Khanna and Palepu (1997) cites the "institutional vacuum" as an issue in the case of companies in developed countries to advance into emerging markets. Meaning of "institutional vacuum" refers to the underdevelopment of local industry economy, the content involved consumers and in performing market transactions between companies in the "asymmetry of information", such as emerging markets. In particular, it is three. ① Underdeveloped (power and infrastructure telephone network , postal services, etc.) of the communication infrastructure. ② In the absence of institutional mechanisms that companies confirmed to consumers with product information. ③ It is a situation that is not accompanied by effective by underdeveloped and institutional laws and regulations. The "institutional vacuum", investment risk to the project is high for the case such that the underdeveloped infrastructure variety needed to expand the business in this way , laws and regulations are underdeveloped , and the adverse effects and failure it is that of a state . Khanna and Palepu (1997) points out that capability in organizational structure diversified group of companies (intermediate tissue) is , and supplement these with their own institutional space . And claims to be able to save transaction costs . As in Figure 1 , the " framework of the institutional vacuum theory" , than the cost of doing business in general market immature capital market , product market , labor market , etc. , of the cost of trade in intermediate organization in the group it means the person is small .

In this paper, we consider the infrastructure export model of Japanese companies from urban infrastructure development projects in Vietnam.

Figure1. "Framework of institutional space theory" Khanna.T and Palepu.K (1997)



Source: Toru FUJII (2014)

3. This paper (case study)

3.1 Exclusive residential area development (Ho Chi Minh City suburb)

Tokyu Group is a core company of Tokyu Corporation . Tokyu Group is composed of eight corporate 235 companies . Was based on traffic business is " urban development " . Specifically , real estate , life services , hotels and resorts , and the like business support . We are also social contribution activities rooted in local community activities such as school corporations and foundations . Tokyu Group has built the largest city in Japan that 600,000 inhabitants live in central Tokyo (15 ~ 35km distance) the " Tokyu garden city " . Tokyu Group believes that the capability of these know-how .Have experience of construction hotels

and resorts abroad from previous Tokyu Group . Tokyu Group to perform a re- challenge of overseas businesses in the three-year medium-term plan of fiscal 2012 . To center management strategy of the real estate development in emerging markets in the future . I have established a joint venture company " BECAMEX TOKYU CO.,LTD." (8 trillion 600 billion dong capital = about 32.7 billion yen) in collaboration with the (BECAMEX IDC CORP.) Conglomerate of Binh Duong Province in Vietnam 's largest . Tokyu Group has invested 65% .

BECAMEX IDC CORP was founded in 1976 . Business is a developer to develop industrial parks , residential areas , and urban transport infrastructure . The industrial park has been developed so far , there is My Phuoc industrial city and the Vietnam Singapore Industrial Park (VSIP). BECAMEX IDC CORP. has been working in the field of education , such as securities , finance , insurance , banking , construction , trade , real estate , services , communications , concrete production , construction materials , mining , pharmaceuticals , and medical care . BECAMEX IDC CORP. has 28 companies in all of them. The new urban development of Binh Duong Province participate , a joint venture " BECAMEX TOKYU CO.,LTD." is located about 30 km north of Ho Chi Minh City . It is a large-scale project to build a new city in the vast land of 10 million square meters total area .Development of Binh Duong New City is as follows. ① " BECAMEX TOKYU CO.,LTD." to develop "Tokyu Binh Duong Garden City". ② Mapletree group is to develop a high-tech park. ③ Eastern International University. ④ International School of Kinerworld.⑤ commercial finance center, banking, food service area, office, residential (Condominiums, townhouses, single-family)

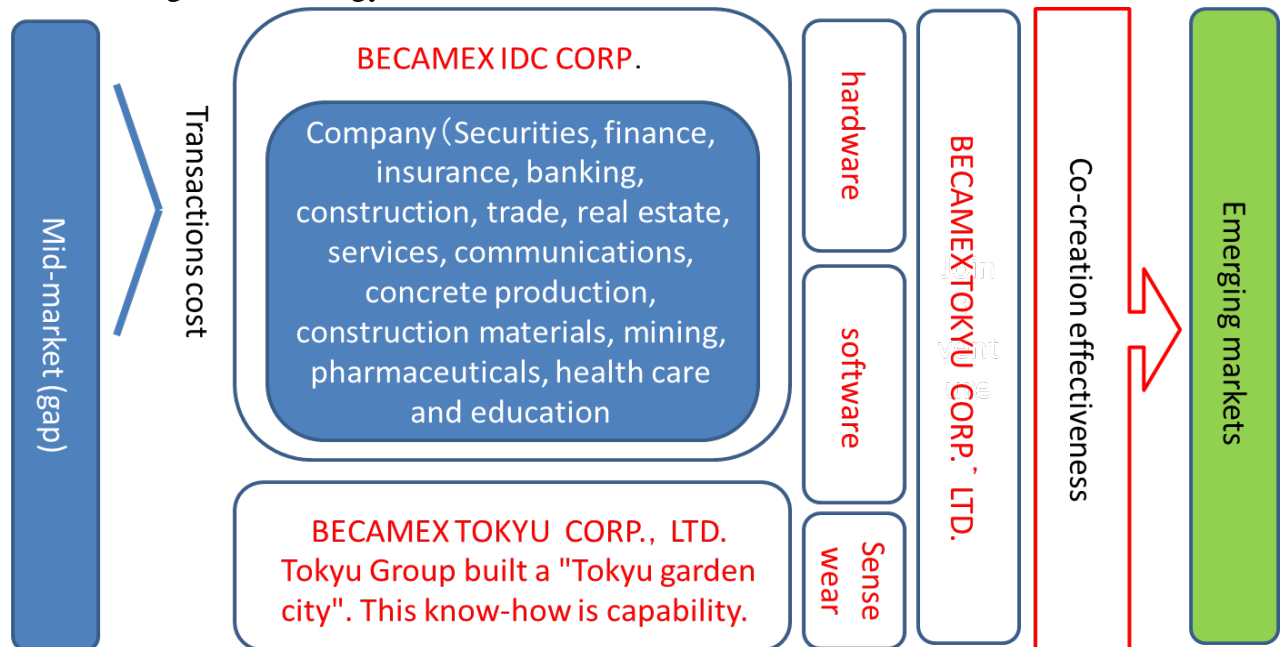
Resident number of Binh Duong New City will be 120,000 people. And there are planning a city that 400,000 people work. I will explain the planning schedule for this project. Government was promoted to the Ministry of capital move the administrative function in 2013. Office and commercial facilities and industrial parks are in place in 2020. And new city 125 000 inhabitants live is formed.

Joint venture " BECAMEX TOKYU CO.,LTD." is developing "Vietnam version Tokyu garden city".This total project cost is 200 billion yen. This project is planning to sale the 1500 units in the residential area (30 storeys) will be built in 2014. And are planning to develop a commercial and entertainment facilities and offices and apartments and House of 7500 units by 2020. Joint venture " BECAMEX TOKYU CO.,LTD." is expected to obtain a high profit in rental income of office and commercial facilities and condominiums. It is below and shows the value chain urban development operators (developer). ① Business Planning,② land acquisition, ③ business, ④ development (design estimate material purchase orders and construction delivery),⑤rental maintenance and operational management

" BECAMEX TOKYU CO.,LTD." is a developer to develop industrial parks, residential areas, and urban transport infrastructure. It owns an investment company subsidiaries and 28 companies of education, such as securities, finance, insurance, banking, construction, trade, real estate, services, communications, concrete production, construction materials, mining, pharmaceuticals, health care and in addition. BECAMEX IDC CORP. has realized by the activities of the group companies Khanna and Palepu (1997) the "institutional vacuum". So why joint venture with Tokyu Group or was necessary. It is as in Figure 2. Tokyu Group has experience of urban development in Japan. It is because they have the sense to wear

necessary urban development. The sense wear, it is a "tool and products of sense." Sense Clothing is a concept produced to capture what falls spilling from the idea that software and conventional hardware.

Figure 2. Strategy model of " BECAMEX TOKYU CO.,LTD."



Source: Toru FUJII(2014)

BECAMEX IDC CORP. has owns the hardware and software for performing the urban development in the group. But they do not have a sense wear to achieve urban development that easy to live in comfort. I think that BECAMEX IDC CORP can be considered to have the alliance strategy of the Tokyu Group. Joint venture " BECAMEX TOKYU CO.,LTD." launch route bus service that connects the new city and Ho Chi Minh City in collaboration with the Ministry of Binh Duong further. Joint venture "BECAMEX TOKYU CO.,LTD." to work in real estate development and maintenance of the public transportation network. This strategy is also the same as the business model of Tokyu group in Tokyo before. "Packaged export infrastructure" strategy is an important growth of the Japanese economy. This package has the hardware and software. And, the combination of the sense-ware is an important issue to them. I say this is what the driving force of competitiveness of Japanese companies.

3.2 Ho Chi Minh City Urban Railway Construction Project, (Zozao from Ho Chi Minh City)

The population of Ho Chi Minh City is 800 million people currently. The population increased by 200,000 people every year in Ho Chi Minh City. I considered the population of Ho Chi Minh City near future will become 10 million. Use number of cars and motorcycles has increased due to population growth, air pollution and accidents and traffic congestion has become a serious problem. Public transport there is little Ho Chi Minh City. Challenge of most of Ho Chi Minh City is to introduce the urban railway. And in support of Ho Chi Minh

City Urban Development Master Plan, JICA performs provision of yen loans with STEP against construction of Line 1 Ho Chi Minh city rail. I will explain the outline of this project.

(1) Project name: "Ho Chi Minh City Urban Railway Construction Project"

(2) Overview : The construction plan of urban rail of up to 19.7km.

(Suoitien of the northeastern part of the valve body - the city of Ho Chi Minh City center)

(3) Supply vehicle: Hitachi group was awarded 51 cars vehicle supply package.

(4) Finished : 2018 opening schedule

(5) Yen loan : The first phase was accepted in fiscal 2006, about 20.8 billion yen
(Total project cost is about 2,359 million yen)

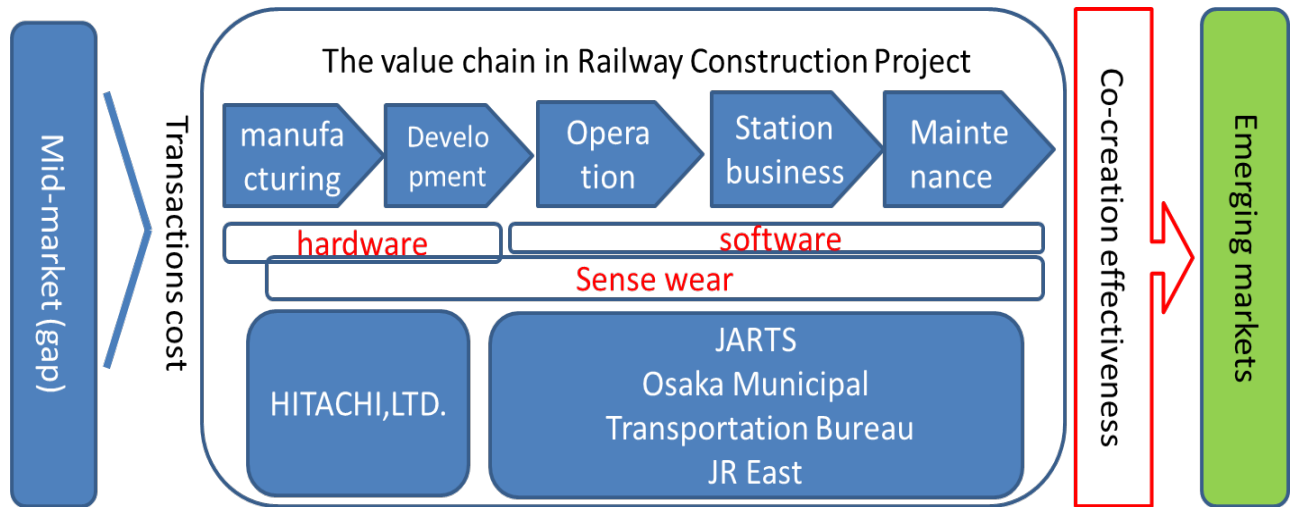
Line of Vietnam Railways is a type of old non-electrified diesel locomotive traction. Ho Chi Minh city railway construction project, are planned until 1-6 Line. The master plan develop the underground shopping center by aggregating the 1-4 Line to market before the central station. The railway technology of Japan was highly regarded. That is control system,overhead line construction,railway vehicle body,signal system,traffic control system. In addition, it is a competitive advantage in the field of digital signage and fare collection system.

Next I will explain about the city railway operation management system. The value chain in railway construction project is a① railway construction, ② railroad development, ③ railway operation, ④ station business, ⑤ maintenance.However, problems in Vietnam , there is no know-how and experience of management, operation and repair. Therefore, Japanese companies are support overall, including software also (management, operation and repair, etc.). For urban railway traffic control such, Osaka Municipal Transportation Bureau · JR East has worked with JARTS (Japan Railway Techinacal Service).That contents are provide technical full cooperation on such as a driver planning and human resource development. At the request of the ministry of Land, Infrastructure and transport, and dispatched one canons, Osaka City has led the paperwork and basic design, such as Ho Chi Minh City staff. The operating company after the establishment. They will receive training in Japan responsible for teaching in the future Vietnam as "guidance motorman".

Then, about 10 people Osaka staff, go to Vietnam with a "guidance motorman". They teaching "train driver", "driving commander member" and "station staff" of local staff. This operation is a technology to foreign countries for the first time as Japan.

A feature of this project, the hardware of urban railway, there is no technology of software in Vietnam. Japanese companies are exporting technology and therefore these. In addition there is no know-how and experience of management, operation and repair of the city railway in Vietnam. Therefore, Japanese companies is "export model of overseas infrastructure system" doing the support overall, including the soft side of management, operation and repair, such as the development of railway infrastructure.

Figure 3. Strategic model of Ho Chi Minh City Urban Railway Construction Project



Source: Toru FUJII (2014)

3.3 North-South highway construction projects.

The highway is developed between Zozao to Ho Chi Minh City. This purpose is traffic demand relaxation of Route 51 from Route 1. Vietnam can be achieved the efficiency of traffic congestion and distribution efficiency by this measure. I will explain the outline of this project.

(1) Project name: "North-South highway construction projects"

- (2) Overview:
- ① "package 1A (elevated: and 7.5km point, the annular Route 2 interchange from the starting point), December 2009 start of construction
 - ② "package 1B (11km point from 7.5km elevated), April 2010 start of construction
 - ③ "package 2 (14km point 11km from Long Thanh Bridge), May 2010 start of construction"
 - ④ "package 3 (Last 23.9km point 14km from the embankment), May 2010 start of construction
 - ⑤ "Toll collection equipment (whole line 55km)" (3) Yen loan: 41.6 billion yen

In the road construction sector, competitive bidding of construction companies is carried out. Japanese companies price competitiveness is low compared to the competitors of China and Korea. Japanese companies cannot received an order construction engineering field for that. However, Industry Association of Japan has received an order to "⑤toll collection equipment (whole line 55km)".I will explain the outline of this project. Consortium of three companies Toshiba, Hitachi, Ltd., ITOCHU Corporation received an order at 40 billion yen toll collection equipment from Vietnam highway Corporation in March 2014. Scope is a section of the whole line of 55km from Ho Chi Minh City between Zozao. Highway transportation system target system is a (ITS).

Highway transportation system (ITS) is configuration from electronic toll collection

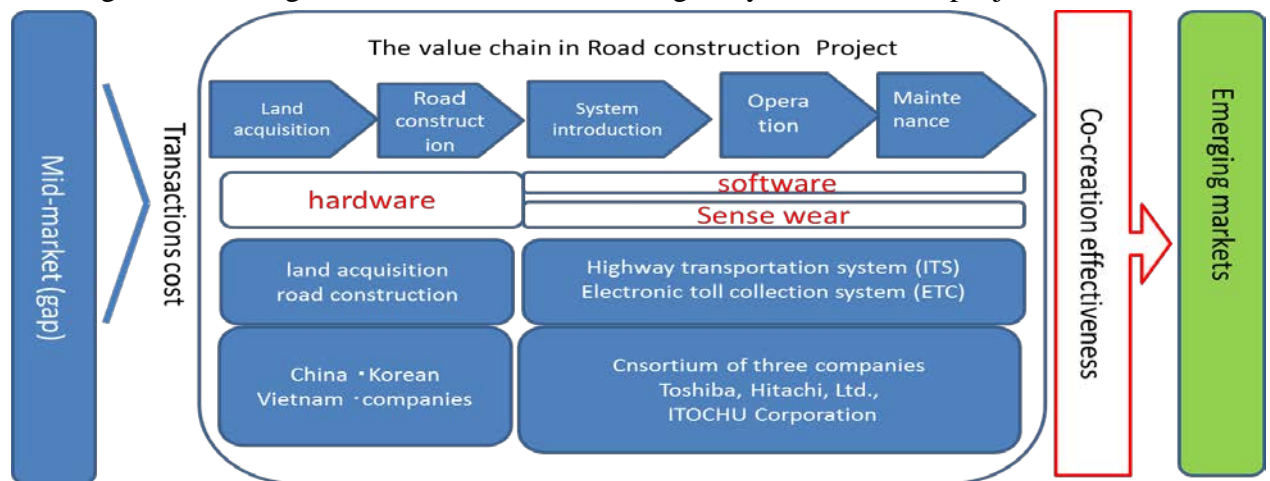
system (ETC), traffic control systems, and monitoring system.

Toshiba (ITS system), Hitachi (equipment installation work), the ITOCHU Corporation (Business Matters)

The value chain of the road construction company is ① land acquisition, ② road construction, ③ system introduction, ④ operation management, ⑤ maintenance.

I will explain the features of this project. Japanese companies are inferior competitive pricewise compared with companies in China and Vietnam and Korean companies. And therefore construction engineering business relationship can not order for it. Japanese companies (consortium of three companies Toshiba, Hitachi, Itochu) has been the build-to-order target (ITS) highway transportation system. IT is a competitive advantage in the art even when compared to companies in the world for this.

Figure 4. Strategic model of North-South highway construction projects



Source: Toru FUJII (2014)

The highway construction project in Vietnam in the future, there are plans of a full-length 1811km of Ho Chi Minh City ⇔ Da Nang ⇔ Hanoi. In addition, there is a highway development plan of about 6000km in 22 routes. In this project, export model of Japan is the center of business that has a sense of high technology software and senseware unique to Japan highway transportation system, such as (ITS).

4. Conclusion (Achievements and challenges of the present study)

In this paper, I used the (Khanna and Palepu 1997) "framework of the institutional vacuum theory". And I considered the infrastructure export model of Japanese companies. More specifically, it was a case study of three. ① Exclusive residential area development (Ho Chi Minh City suburb), ② Ho Chi Minh City Urban Railway Construction Project, (Zozao from Ho Chi Minh City), ③ North-South highway construction projects. As a result, "Case ①: Exclusive residential area development (Ho Chi Minh City suburb) is "packaged infrastructure export". Tokyu Group has a package the sense wear necessary to urban development and it is capability. Then "Case ②: Ho Chi Minh City Urban Railway Construction Project, (Zozao from Ho Chi Minh City)" is hardware of urban railway, there is

no technology of software in Vietnam. And Japanese companies are exporting these technologies. In Vietnam, there is no know-how and experience of management, operation and repair of urban rail. Therefore, Japanese companies are doing the support comprehensive, including not only the development of rail infrastructure, as well sense software and soft surface of the management, operation and repair, etc.. This is the "export model of overseas infrastructure system." Then I put together the " Case③: North-South highway construction projects." Japanese companies can not accept an order the business of civil engineering relationship is inferior to the competition of price compared with companies in China and Vietnam and Korean companies. Japanese companies (consortium of three companies Toshiba, Hitachi, Itochu) has been the build-to-order target (ITS) highway transportation system. Because ITS is a competitive advantage in the world. Because they have a high-tech software and senseware in Japan.

From the above discussion, overseas export infrastructure system of Japanese companies there are three.

Case ① is a model to implement only the sense wear in Japanese companies.

Case ② is a model to package the (hardware and software sense wear) of all Japanese companies.

Case ③ is a model with a combination of the senseware and software in Japan. I describe the conclusion from a study of more than.

Competitive advantage of Japan is a sense wear. It is the biggest challenge for overseas export infrastructure systems.

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