# Logistics Issues Analysis Team Research Report

Changes in Imports/Exports Between Vietnam, Thailand and Japan and the Current Situation and Issues of Vietnam's Transportation Infrastructure

# Eiichiro Iwao, Dr., Team Leader

Researcher, Research Center for Asia Industries Professor, School of Commerce

### 1. Purpose and method of this report

In this report, the first purpose is to clarify the changes in import and export volumes between Vietnam, Thailand and Japan from 2003 to 2013. The second purpose is to clarify the current situation and issues of Vietnam's transportation infrastructure.

#### 2. Transition of import and export volumes between Japan and Vietnam and Thailand

#### 2-1 Method of this chapter

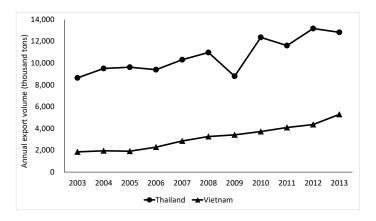
The purpose of this chapter is to show the transition of the import and export volumes and tons of imports and exports per billion yen between 2003 and 2013 from Vietnam and Thailand to Japan. Port statistics were used for the analysis of the import and export volumes. Meanwhile, port statistics and trade statistics were used for the analysis of tons of imports and exports per billion yen.

#### 2-2 Transition of export volume from Japan to Vietnam and Thailand

The analysis of export volume shows that the export volume to Vietnam increased from 2003 to 2013. The export volume to Thailand decreased in 2006, 2009 and 2011. However, it increased in the other years (Figure 1).

As seen in these results, the export volume from Japan to Vietnam and Thailand has increased over the 11-year period.

Figure 1: Transition of export volume by country from Vietnam and Thailand to Japan (2003 to 2013)<sup>1)</sup>



#### 2-3 Transition of import volume from Japan to Vietnam and Thailand

The analysis of import volume in both Vietnam and Thailand shows that it increased every year except for 2009. However, the import volume in 2013 is lower than in 2008 (Figure. 2).

These results show that the export volume from Vietnam and Thailand to Japan was affected by the decreased import volume in 2009.

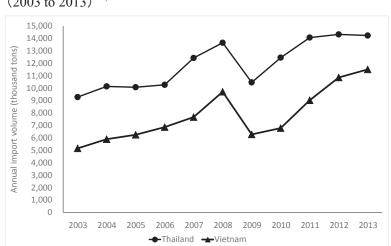


Figure 2: Transition of import volume by country from Vietnam and Thailand to Japan (2003 to 2013) 1)

#### 2-4 Transition of export/import tons per billion yen from Vietnam and Thailand to Japan

The analysis shows that imports in Vietnam have decreased. Exports in Vietnam decreased until 2008. However, they increased in 2009, and since then there have been no major changes. Imports in Thailand decreased until 2006. However, they have increased since then. Exports in Thailand decreased until 2007. However, they increased in 2009, and there have been no major changes since then (Figure 3).

The increase rates in 2003 and 2013 were less than 100%. Specifically, imports from Vietnam had an increase rate of 57.57%. From this result, imports of products with high added value from Vietnam are assumed to be increasing compared with 2003.

Exports to Vietnam had an increase rate of 84.05%, and exports to Thailand had an increase rate of 78.41%.

These results show that although the ratio is smaller than that of imports from Vietnam, imports of products with high added value are increasing compared with 2003. For this reason, exports of products with high added value to Vietnam and Thailand are assumed to be increasing compared with 2003.

Imports from Thailand had an increase rate of 98.13%. This result shows that imports from Thailand

had almost the same value as in 2003 (Table 1).

Import/export tons per billion yen Thailand (imports) ── Vietnam (imports) -Thailand (exports) --- Vietnam (exports)

Figure 3: Transition of tons of imports and exports per billion yen from Vietnam and Thailand to Japan

Table 1: Ratio of import/export tons per billion yen from Vietnam and Thailand to Japan in 2003 and 2013

	2003	2013	Increase
	(tons/billion yen)	(tons/billion yen)	rate
Vietnam (imports)	1439.18	828.47	57.57%
Thailand (imports)	674.47	661.88	98.13%
Vietnam (exports)	611.77	514.20	84.05%
Thailand (exports)	466.04	365.44	78.41%

# 3. Current situation and issues of transport infrastructure in Vietnam

#### 3-1 Transport infrastructure in this chapter

The purpose of this chapter is to clarify the current situation and problems of Vietnamese ships, trucks and railway infrastructure through the use of statistical data and interview surveys.

#### 3-2 Current situation and problems of ports in Vietnam

#### (1) Current situation of ports in Vietnam

In this section, the current situation of five ports (Hai Phong Port, Saigon Port, Saigon New Port, VICT Port and Da Nang Port) is shown by the port facilities (the maximum value of acceptable vessels, the number of berths and the number of gantry cranes) and the cargo handling volume (import/export cargo and domestic transfer cargo) based on HP data (Table 2).

The results show that the maximum acceptable ship size is the largest in Saigon Port (60,000 DWT). On the other hand, the smallest is 20,000 DWT in VICT Port. The maximum value of berths is the largest in Haiphong Port (21 berths). On the other hand, Saigon Port and VICT Port (4 berths) are the smallest. The maximum value of quay gantry cranes is the largest in Saigon New Port (11 cranes). On the other hand, Da Nang Port and Saigon Port (2 cranes) are the smallest. The maximum value of imported cargo is the largest in Saigon New Port (22,963 thousand tons). On the other hand, Da Nang Port (1,577 thousand tons) has the smallest value. The maximum value of exported cargo is the largest in Saigon New Port (22,962 thousand tons). On the other hand, Da Nang Port (2,285 thousand tons) has the smallest value. The maximum value of domestic transfer cargo is the largest in Saigon Port (5,960 thousand tons). On the other hand, Da Nang Port (2,160 thousand tons) has the smallest value, excluding 0 thousand tons at Saigon New Port.

These results of the data on cargo handling volumes clarify three things: (i) Saigon New port specializes in international cargo; (ii) Hai Phong Port and Saigon Port import more cargo than they export; (iii) Da Nang Port and VICT Port have larger export cargo volume than import cargo volume.

Table 2: Characteristics of major ports in Vietnam<sup>2)</sup>

Port name Acceptable ship maximum value (DWT)	Berth number	Quay gantry crane number	Cargo throughput			
			Imports (thousand T)	Exports (thousand T)	Domestic (thousand T)	
Hai Phong	40,000	21	8	9,282	5,554	4,899
Saigon	60,000	4	2	4,625	570	5,960
New Saigon	30,790	7	11	22,963	22,962	0
Da Nang	45,000	11	2	1,577	2,285	2,160
VICT	20,000	4	7	1,626	2,571	2,808

Note: The data show the values in 2014.

#### (2) Problems of ports in Vietnam

In this section, we look at the issues and countermeasures of ports based on the interview survey at Da Nang Port.

Da Nang Port has three characteristics. First, the port operation time is 24 hours. Second, it is inferior to Saigon Port, but ships of up to 45,000 DWT are acceptable. Third, international containers arrive on 15 to 20 flights per week. On the other hand, Da Nang Port has two problems. First, the Customs Warehouse is small, at about 24 ha. Second, among the cargo handled at Da Nang Port,

cargo through the East-West Economic Corridor accounts for about 2%. The reason why cargo handled at Da Nang Port does not pass through the East-West Economic Corridor is that this corridor passes through areas where economic development has not progressed.

In a countermeasure to this problem, the Laos government is planning three industrial parks along the East-West economic corridor (Savannakhe).

#### 3-3 Current situation and problems of roads in Vietnam

#### (1) Current situation of roads in Vietnam

In this section, the current situation of the roads in Vietnam is indicated by the total road length and ratio of paved road to the total road length and the total length of expressways and cargo transport (Table 3).

As a result, Vietnam's total road length was 238,000 km in 2004 and 326,000 km in 2012, which is an increase of about 88,000 km in the past six years. The ratio of paved road to the total road length was 58.00% in 2004 and 66.30% in 2012, which is an increase of 8.30% in the past eight years. The total length of the expressways was 0 km until 2008, but it increased to 120 km by 2012. The annual cargo transport volume was 265 thousand tons in 2004 and 735 thousand tons in 2012, which is an increase of about 470 thousand tons in the past eight years.

Table 3: Statistical data on roads in Vietnam<sup>3)</sup>

	2004	2006	2008	2010	2012
Total road length (km)	238,000	269,900	287,700	295,100	326,000
Ratio of paved road to total road length (%)	58.00	60.35	53.40	64.40	66.30
Total length of expressways (km)	0	0	0	50	120
Cargo transport (thousand ton)	265	339	456	587	735

#### (2) Problems of roads in Vietnam

In this section, we look at the issues and countermeasures of roads from the results of a travel study on the East-West Economic Corridor from Da Nang City to Savannakhet City in Laos.

The results show that the city of Da Nang has many paved roads. Heading towards the mountain area, however, there are many unpaved roads.

Particularly in Laos, there are many unpaved roads, some of the roads have numerous holes, and trucks have to avoid the holes while driving.

As a result, transportation times have become longer than expected.

#### 3-4 Current situation and problems of railway tracks in Vietnam

#### (1) Current situation of railway tracks in Vietnam

In this section, the current situation of the railway tracks in Vietnam is indicated by the total railway route length and the number of railway locomotives ready for operation and the number of freight wagons and cargo transport (Table 4).

As a result, Vietnam's total railway route length was 2,764 km in 2005 and 2,544 km in 2012, which is a decrease of about 220 km in the past seven years. The number of railway locomotives ready for operation was 302 in 2005 and increased to 319 in 2007. However, it decreased to 303 in 2012, which is an increase of one in the past seven years. The number of freight wagons was 4,496 in 2005, and it increased in 2006 and then decreased until 2011. However, it increased again in 2012, to 5,332. It has increased by 836 in the past seven years. The annual cargo transport volume was 8,787 thousand tons in 2005 and increased to 9,153 thousand tons in 2006. Subsequently, however, it decreased to 7,076 thousand tons in 2012. It has therefore decreased by 1,711 thousand tons in the past seven years.

Table 4: Statistical data on railways in Vietnam<sup>3)</sup>

	2005	2006	2007	2008	2009	2010	2011	2012
Total railway route length (km)	2,764	2,584	2,577	2,577	2,577	2,577	2,547	2,544
Number of railway locomotives ready for operation (count)	302	299	319	319	297	294	281	303
Number of freight wagons (count)	4,496	5,011	4,913	4,901	4,887	4,853	3,855	5,332
Cargo transport (thousand ton)	8,787	9,153	9,050	8,481	8,248	7,862	7,234	7,076

# (2) Problems of railway tracks in Vietnam

The problem of rail freight transportation is that many of the railway tracks in Vietnam are single tracks. In addition, the railway tracks are not electrified. 4)

These factors mean that the transportation times are long, so rail is not widely used for cargo transportation.

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