21st Voorburg Group Meeting Wiesbaden, Germany, October 9th~13th 2006

# SPPI for Freight Transport by Road in Korea

2006. 10

The Bank of Korea

#### 1. Definition of the service being priced

- In Korea, SPPI for freight transport by road includes i)
   Scheduled Road Freight Charges, ii) Local Road Freight Charges, iii) Special Road Freight Charges.
  - i) Scheduled Road Freight: Freight transported periodically between the two prescribed areas with a truck
  - ii) Local Road Freight: Freight transported by the order of customers with a truck
  - iii) Special Road Freight: Freight transported with a motor vehicle with special equipment
  - o In addition, Railroad Freight Charges, Coastal Waters Freight Charges, Transoceanic Water Freight Charges and Air Freight Fares are surveyed.

SPPI items related to freight transport (SPPI total weight : 294.2, base year : 2000)	weight
Railroad Freight Charges	0.5
Scheduled Road Freight Charges	0.5
Local Road Freight Charges	8.8
Special Road Freight Charges	4.4
Coastal Waters Freight Charges	1.1
Transoceanic Water Freight Charges	4.6
Air Freight Fares	0.9

 Also, Post & Telecommunications includes Courier Service that is similar to freight transport by road. Courier Service is a home-delivery service and is recently fastgrowing.

SPPI item similar to freight transport (SPPI total weight : 294.2, base year : 2000)	weight
Courier Charge	0.6

#### <Reference>

# All Items of SPPI in Korea (base year : 2000)

items of SPPI (SPPI total weight : 294.2)	weight	items of SPPI (SPPI total weight : 294.2)	weight
Transportation	52.9	Financial Services	21.6
Railroad Passenger Fares	3.0	Fees on Domestic Banking Service	3.4
Express Bus Fares	2.5	Fees on L/C Transactions	0.9
Inter-urban Bus Fares	4.8	Fees on Foreign Exchange Transactions	1.0
Taxicab Fares	10.0	Guaranty Fees	0.6
Coastal Waters Passenger Fares	0.3	Credit Card Member-shop Commissions	2.4
Domestic Air Passenger Fares	1.5	Fire Insurance Premium	0.3
International Air Passenger Fares	2.7	Marine Insurance Premium	0.4
Railroad Freight Charges	0.5	Motor Insurance Premium	6.6
Scheduled Road Freight Charges	0.5	Bonds Insurance Premium	0.6
Local Road Freight Charges	8.8	Casualty Insurance Premium	1.1
Special Road Freight Charges	4.4	Security Brokerage Commissions	4.3
Coastal Waters Freight Charges	1.1	Real Estate Activities	90.8
Transoceanic Water Freight Charges	4.6	Rents of Business Offices	38.2
Air Freight Fares	0.9	Rents of Stores	47.0
Road Tolls	3.2	Real Estate Appraisal Fees	0.6
Charges For Vehicle Parking Facilities	1.0	Real Estate Managment Fees	5.0
Harbor & Terminal Dues	0.2	Leasing & Renting	15.5
Air Terminal Facilities Charges	0.4	Domestic Produced Machinery Lease Fees	5.5
Railroad Loading & Unloading Charges	0.3	Imported Machinery Lease Fees	3.6
Harbor Loading & Unloading Charges	1.1	Rental Charges For Heavy Construction Equipment	1.3
General Warehousing	0.6	Rent-a-car Charge	0.1
Refrigeration & Cold Storage Warehousing	0.4	Rental Charges For Office Machinery & Equipment	5.0
Farm Product Warehousing	0.1	Advertising	14.4
ost & Telecommunications	42.8	Radio Advertising Fees	0.8
Postage	1.7	TV Advertising Fees	6.9
Courier Charge	0.6	Newspaper Advertising Fees	6.2
Basic Charge For Fixed Line	1.3	Magazine Advertising Fees	0.5
Local Area Charges	3.9	Professional, Scientific & Technical Services	41.7
Domestic Long Distance Charges	2.5	Judicial Scrivener Fees	1.7
International Long Distance Charges	1.2	Customs Broker Remunerations	0.9
Public Phone Charges	0.4	Patent Attorney Fees	0.9
Leased Line Charges	3.1	Fees on Certified Public Accounting Services	8.0
LM Charges	4.4	Fees on Taxation Services	1.9
Mobile Phone Charges	18.7	Land Surveying Fees	1.0
Special Telecom (telephone) Charges	1.3	Building Design & Supervision Fees	4.4
Internet Access Charges	2.4	Engineering Service Fees	11.4
Information Service Charges	1.3	Data Processing Fees	0.3
		Computer Programming Fees	14.5
		Computer Repairing Charge	3.9
		Other Services	14.5
		Guard Service Charge	2.2
		Fees on Building Cleaning Service	3.1
		Human Waste Collection & Disposal Fees	2.2
		Industrial Waste Collection & Disposal Fees	4.5
		Hotel Charges	1.2
		Inn Charges	1.3

## 2. Pricing unit of measure

- All of the price quotations refer to real transaction trips. The prices of detailed real trips are decided by the followings.
  - o Two areas between which commodities are transported
  - o Types of vehicle with which commodities are transported
  - o Kinds and weights of commodities which are transported
  - o Other transaction conditions

items of SPPI	areas	type of vehicle	kinds and weights
	Seoul<>Busan	Truck	general freight 30Kg
	Gochang-Seoul	Truck(5~10ton)	rice 40Kg
Scheduled Road	Seoul<>Gwangju	Truck	general freight 30Kg
Freight Charges	Seoul<>Jeonju	Truck	fiber roll 40Kg
(total : 12)	Seoul>Busan	Truck(8ton)	export freight 32-35CBM
	Geonggi>Busan	Cargo truck	noodle
	Pohang->Seoul	Trailer	coil
Local Road	Suwon->Busan	Container	appliances
Freight Charges	Busan>Geonggi, Inchun	Truck(18ton)	general freight
(total : 20)	Changwon->Guro(Seoul)	Truck(11ton)	electronics
	Busan->Seoul	Container	irregular
	Busan<->Gangnam(Seou)	Container	irregular
Special Road	Ulsan<->Geonggi, Inchun	Container	irregular
Freight Charges	Inchun->Ulsan	Container	irregular
(total : 15)	Pohang->Seoul	Container	round trip

#### 3. Market conditions and constraints

— In 2005, added value of freight transport by road is equal to about 1% of nominal GDP.

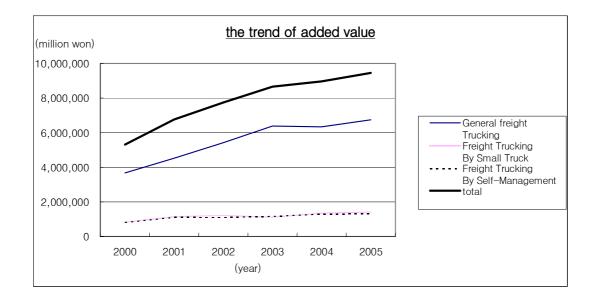
(2005 GDP at current price: 806,622 billion won)

o The classification standard of freight transport by road in Korea National Statistics Office is different from that of SPPI. When SPPI of base year 2005 is made, SPPI classification will be reconciled with that of Korea National Statistics Office.

(year : 2005)

	No. of companies	No. of employees	Revenue (million won)	Cost (million won)	Added Value (million won)
General Freight Trucking	5,974	195,966	13,388,633	12,710,008	6,741,968
Freight Trucking By Small Truck	81,248	81,770	2,283,639	1,003,521	1,413,135
Freight Trucking By Self-Management	63,437	63,457	2,327,360	1,175,018	1,300,568
Total	150,659	341,193	17,999,632	14,888,547	9,455,671
Courier Service (home-delivery)	27	22,501	1,263,588	1,208,339	679,734

Source: Korea National Statistics Office



## 4. Pricing methods

- The prices of freight transport by road is directly obtained from companies(including self-management companies) transporting freight with various types of trucks.
  - o All prices of freight transport by road are real transaction prices. The real transaction prices are monthly surveyed by the methods of 'Direct use of prices of repeated services' and 'Contract pricing'.

#### 5. Quality adjustment methods

Explicit 'quality adjustment methods' are not used in making
 SPPI for freight transport by road in Korea.

# 9. PPI Quality Assessment Framework

Points	Category and Questions	Score
	1. Shipment Price (Weight = .10)	
	Select a. or b.	
0	a. Price represents order pricing, actual price at shipment may well be different.	
100	b. Price represents the completion of service or a proxy measure for the completed transaction.	100
	2. Representative of current period production (Weight = .10)	
	Select a. or b.	
50	a. Emergence of new product lines or critical new product features has not occurred since the index reference period or since sample augmentation last done.	50
0	b. Emergence of new product lines or critical new product features has occurred since the index reference period or since sample augmentation last done.	
	Select c. or d.	
50	c. Product substitution usually occurs when an item becomes obsolete or, if model pricing applies, the models are regularly updated to reflect changes.	
0	d. Product substitution usually does not occur when an item becomes obsolete or, if model pricing applies, the models are not regularly updated to reflect changes.	0
	2 Transaction price (Micialt - 25)	
	3. Transaction price (Weight = .25)  Select the one most prevalent in the industry	
100	a. The price is the real transaction price or a list price that can always be assumed to be equal to the transaction price.	100
50	b. The price is a list price not equal to the transaction price.	
100	c. The price is a unit value for a homogeneous group of products.	
50	d. The price is a unit value for a non-homogeneous group of products.	
75	e. The price is a model price.	
50	f. The price is constructed from input cost plus profit and overhead mark-up.	
	1 Output price (Meight - 25)	
	4. Output price (Weight = .25)  Select the one most prevalent in the industry	
100	a. Recorded price reflects an actual transaction or average of actual transactions.	100

75	b. Recorded price reflects a model transaction incorporating the pricing of all features found in an actual transaction.	
50	c. Recorded price reflects a model transaction incorporating the pricing of only some of the features found in an actual transaction.	
50	d. Recorded price reflects some components of a transaction.	
50	e. Recorded price reflects input costs plus overhead and profit margins incorporating the pricing of all features found in an actual transaction.	
25	f. Recorded price reflects input costs plus overhead and profit margins incorporating the pricing of some of the features found in an actual transaction.	
0	g. Recorded price reflects charge out rates for fixed labor inputs not directly tied to a specific quantity of output.	
	5. Timely measure (Weight = .10)	
	Select a. or b.	
50	a. Pricing data reflect the service provision in the current period and are not lagged.	50
0	b. Pricing data are lagged.	
	Select c., d., or e.	
50	c. Pricing data reflect an average over the entire period.	50
40	d. Pricing data reflect an average of multiple measurements over a portion of the period.	
25	e. Pricing data reflect a single point in time.	
	6. Constant quality maintained (Weight = .20)	
	Select a. or b.	
100	a. Rapid changes to product specification are not expected or, if they are, a good method to explicitly quality adjust is in use.	
0	b. Rapid changes to product specification are expected and no explicit quality adjustment method is in use.	0
	Total =	75
	Type A point range = over 90	
	Type B point range = 70 to 90	75
	Type C point range = less than 70	