

H Republic of Korea

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H.1 Introduction

This chapter describes the procedure and considerations underlying the construction of the Korean input-output (I-O) table for the Global Trade Analysis Project (GTAP) Data Base version 12. The document is organized as follows. Section 2 provides a short description of the general characteristics of the Korean I-O table. Section 3 shows how the Korean I-O table is mapped to the GTAP concordance. Section 4 explains how negative values in the initial Korean I-O table are adjusted, and Section 5 shows how commodity taxes on domestic products and imports are calculated. The final section mentions information not available from the Korean I-O table.

H.2 Data Source

The Korean I-O table used for the GTAP database version 12 was compiled by the Bank of Korea in Seoul (The Bank of Korea, 2024). The reference year of the Korean I-O table is 2020, and the unit of accounts is million Korean won (KRW). The Korean I-O table for 2020 is grouped commodity by commodity and includes 380 commodities. It was calculated by multiplying the supply table of 380 commodities and 278 industries by the use table of 380 commodities and 278 industries. The I-O table for 2020 is one of the I-O tables compiled using survey data, like the Korean I-O table for 2015 used for the GTAP database version 11.³⁰

The Korean I-O tables for 2020 are evaluated at 3 different prices: purchaser prices, producer prices, and basic prices. Each of the Korean I-O tables for 2020 evaluated at 3 different prices includes three different transaction tables: a transaction table of domestically produced goods and services, a transaction table of imported goods and services, and a transaction table of composite goods and services composed of domestic and imported goods and services.

The final demand matrix in the three transaction tables includes private consumption, government expenditure, private fixed capital formation, government fixed capital formation, change in stocks, acquisition less disposal of valuables, and exports.³¹ Acquisition less disposal of valuables was added to change in stocks. Government fixed capital formation was added to private

³⁰The Bank of Korea has compiled an I-O table using survey data every 5 years (for example, the I-O tables for 2005, 2010, 2015, and 2020) and an annual I-O table (for example, the I-O tables for 2016, 2017, 2018, and 2019) using non-survey data based on the I-O table compiled using survey data. By the way, the I-O tables for 2016, 2017, 2018, and 2019 were evaluated at producer prices only, while the I-O tables for 2005, 2010, 2015, and 2020 were evaluated at 3 different prices: purchaser prices, producer prices and basic prices, which makes it possible to calculate commodity taxes on domestically produced goods and services and commodity taxes on imported goods and services by subtracting relevant data at basic prices from relevant data at producer prices (refer to 5. Calculating commodity taxes on domestic products and imports for more details). Therefore, the I-O table for 2019 was not used for the GTAP database version 12, but the I-O table for 2020 was used.

³¹The final demand matrix of the transaction table of imported goods and services includes a column of exports equal to zero.

fixed capital formation to get a vector of investment usage of domestic products and a vector of investment usage of imports.

The matrix of value added in the transaction table of composite goods includes compensation of employees, operating surplus, depreciation of fixed capital, and net indirect taxes (less subsidies). Depreciation of fixed capital was added to operating surplus to obtain a vector of employment of capital.

H.3 Mapping the Korean I-O table to the GTAP sectoral classification

Table A in the appendix shows how 380 sectors of the Korean I-O table are mapped to the GTAP sectoral classification (GSEC3). There is no domestic production of sugar cane and sugar beet in Korea, and the Korean I-O table does not include sugar cane and sugar beet (sector 6 of the GTAP database). Eight sectors should be split into more than one sector of the GTAP database: sector 2 (wheat and other crops), sector 18 (other livestock breeding), sector 25 (agriculture, forestry, and fishing services), sector 35 (slaughtering and meat processing), sector 41 (polished rice, barley, and others), sector 49 (animal and vegetable fats and oils), sector 335 (services auxiliary to finance and insurance), and sector 336 (residential services) of the Korean I-O table. The data required to calculate the splits are based on the data on supplies of domestic and imported goods attached to the Korean I-O tables for 2020. For splitting the eight sectors of the Korean I-O table into more than one sector of the GTAP database, the data on the total supply of more than 3,400 commodities consisting of domestic production and imports are used, which are attached to the Korean I-O table.

Sector 2 (wheat and other crops) of the Korean I-O table includes wheat and other crops and is split into sector 2 (wheat) and sector 3 (cereal grains nec) of the GSEC3, as seen in Tables 8.16 and 8.17. The * signifies the Korean I-O table sector affected by the split. 27.38 percent and 72.62 percent of sector 2 (wheat and other crops) of the Korean I-O table were assigned to sector 2 (wheat) and sector 3 (cereal grains nec) of the GSEC3, respectively, as shown in Table 8.17.

Table 8.16: Split of sector 2 (wheat and other crops) of the Korean I-O table in accordance with GSEC3

GTAP (GSEC3)		Korean I-O table	
02	Wheat	2*	Wheat and other crops
03	Cereal grains nec	2*	Wheat and other crops

Sector 18 (other livestock breeding) of the Korean I-O table is split into sector 9 (bovine cattle, sheep and goats, horses), sector 10 (animal products nec), and sector 12 (wool, silk-worm cocoons) of the GSEC3, as shown in Table 8.18. The shares of components of sector 18 (other livestock breeding) of the Korean I-O table are presented in Table 8.19. 59.21 percent, 21.19 percent and 19.6 percent of sector 18 (other livestock breeding) of the Korean I-O table were assigned to sector 9 (bovine cattle, sheep and goats, horses), sector 10 (animal products nec), and sector 12 (wool, silk-worm cocoons) of the GSEC3, respectively, as shown in Table 8.19.

Table 8.17: Shares of components of sector 2 (wheat and other crops) of the Korean I-O table

Commodity	Domestic production (mil. won)	Imports (mil. won)	Total supply (mil. won)	Share (%)
Wheat	16,463	1,145,544	1,162,007	27.16
Buckwheat	7,125	2,053	9,178	0.21
By-product (wheat)	407	0	407	0.01
Subtotal	23,995	1,147,597	1,171,592	27.38
Rye	69,871	359	70,230	1.64
Unhulled barley	24,381	5,465	29,846	0.7
Beer barley	24,447	11,999	36,446	0.85
Corn	110,996	2,797,696	2,908,692	67.99
Miscellaneous	26,863	32,898	59,761	1.4
By-product (grain)	1,752	94	1,846	0.04
Subtotal	258,310	2,848,511	3,106,821	72.62
Total	282,305	3,996,108	4,278,413	100

Table 8.18: Split of sector 18 (other livestock breeding) of the Korean I-O table in accordance with GSEC3

GTAP (GSEC3)			Korean I-O table	
09	Bovine cattle, sheep and goats, horses	15	Beef cattle	
		18*	Other livestock breeding	
		25*	Agriculture, forestry and fishing services	
10	Animal products nec	16	Swine	
		17	Poultry and eggs	
		18*	Other livestock breeding	
		25*	Agriculture, forestry and fishing services	
12	Wool, silk-worm cocoons	18*	Other livestock breeding	

Table 8.19: Shares of components of sector 18 (other livestock breeding) of the Korean I-O table

Commodity	Domestic production (mil. won)	Imports (mil. won)	Total supply (mil. won)	Share (%)
Goats	152,573	0	152,573	14.24
Goat milk	364,296	0	364,296	33.99
Deer	23,156	0	23,156	2.16
Antlers of the deer	38,200	56,337	94,537	8.82
Subtotal	578,225	56,337	634,562	59.21
Honey	139,180	18,279	157,459	14.69
Nectar	25,389	27,467	52,856	4.93
Dog	0	5,357	5,357	0.5
Rabbit	4,496	990	5,486	0.51
Other livestock products	0	5,988	5,988	0.56
Subtotal	169,065	58,081	227,146	21.19
Silk-worm cocoons	8,318	62	8,380	0.78
Fur	291	57,546	57,837	5.4
Green skin and pelt	0	31,654	31,654	2.95
By-products	19,118	93,040	112,158	10.47
Subtotal	27,727	182,302	210,029	19.6
Total	775,017	296,720	1,071,737	100

Sector 25 (agriculture, forestry and fishing services) of the Korean I-O table is split into sectors 1-4, 7-11, 13 and 14 of the GSEC3, as shown in Table 8.21. Services of agriculture, livestock, forestry and fishing in the data on supplies of domestic and imported goods attached to the Korean I-O tables for 2020 are shown in Table 8.20. By the way, sector 25 (agriculture, forestry and fishing services) of the Korean I-O table is only one sector, not split into four parts for agriculture, livestock, forestry and fishing in the Korean I-O table. After 16.63 percent and 6.02 percent of sector 25 (agriculture, forestry and fishing services) of the Korean I-O table were assigned to sector 13 (for) and sector 14 (fsh) of the GTAP DB, respectively, as seen in Table 8.20, 58.88 percent of sector 25 (agriculture, forestry and fishing services) of the Korean I-O table were assigned to sectors 1-4, 7-8 of GSEC3, and 18.48 percent to sectors 9-11 of GSEC3, as shown in Table 8.21.

Table 8.20: Agriculture, forestry and fishing services (sector 25) of the Korean I-O table

Services by sector	Domestic production (mil. won)	Shares (%)
Agriculture services	707,274	58.88
Livestock services	221,950	18.48
Forestry services	199,755	16.63
Fishing services	72,335	6.02
Total	1,201,314	100.00

Table 8.21: Split of sector 25 (agriculture, forestry and fishing services) of the Korean I-O table in accordance with GSEC3

GTAP (GSEC3)		Korean I-O table	
01	Paddy rice	01	Unmilled rice
		25	Agriculture, forestr
02	Wheat	02	Wheat and other cro
		25	Agriculture, forestr
03	Cereal grains nec	02	Wheat and other cro
		25	Agriculture, forestr
04	Vegetables, fruit, n	03	Pulses
		05	Vegetables
		06	Fruits
		25	Agriculture, forestr
05	Oil seeds	11	Seeds
06	Sugar cane, sugar be	No	existent
07	Plant-based fibers	13	Other inedible crops
		25	Agriculture, forestr
08	Crops nec	04	Potatoes
		07	Floricultural crops
		08	Cultivated medicinal
		09	Leaf tobacco
		10	Natural rubber
		12	Other edible crops
		25	Agriculture, forestr
09	Bovine cattle, sheep	15	Beef cattle
		18	Other livestock bree
		25	Agriculture, forestr
10	Animal products nec	16	Swine
		17	Poultry and eggs
		18	Other livestock bree
		25	Agriculture, forestr
11	Raw milk	14	airy farming
		25	Agriculture, forestr
12	Wool, silk-worm coco	18	Other livestock bree
13	Forestry	19	Forest planting and
		20	Raw timber
		21	Edible forestry prod
		22	Misc. forestry produ
		25	Agriculture, forestr
14	Fishing	23	Fishing
		24	Aquaculture
		25	Agriculture, forestr

Table 8.22: Shares of sectors 1-24 of the Korean I-O table for the split of sector 25 (agriculture, forestry and fishing services) of the Korean I-O table

GTAP sectors		Sectors of Korean I-O table		Domestic production (mil. Won)	Share (%)	Share (%) used
01	pdr	01	Unmilled rice	8,040,659	15.28	11.82
02	wht	02*	Wheat and other crop	23,995	0.05	0.04
03	gro	02*	Wheat and other crop	258,310	0.49	0.38
04	v_f	03	Pulses	563,361	1.07	
		05	Vegetables	12,041,256	22.88	
		06	Fruits	4,588,736	8.72	
Subtotal of 04 v_f				17,193,353.00	32.67	25.27
07	pfb	13	Other inedible crops	13,213	0.03	0.02
08	ocr	04	Potatoes	1,326,961	2.52	
		07	Floricultural crops	509,972	0.97	
		08	Cultivated medicinal	1,826,596	3.47	
		09	Leaf tobacco	74,403	0.14	
		10	Natural rubber	0	0	
		12	Other edible crops	598,694	1.14	
Subtotal of 08 ocr				4,336,626.00	8.24	6.37
09	ctl	14*	Dairy farming	2,580,497	4.9	
		15	Beef cattle	6,050,783	11.5	
		18*	Other livestock bree	578,225	1.1	
Subtotal of 09 ctl				9,209,505	17.5	13.53
10	oap	16	Swine	6,672,392	12.68	
		17	Poultry and eggs	4,518,022	8.58	
		18*	Other livestock bree	169,065	0.32	
Subtotal of 10 oap				11,359,479	21.58	16.69
11	rmk	14*	Dairy farming	2,195,991	4.17	3.23
Total				52,631,131	100	77.35

Sector 35 (slaughtering and meat processing) of the Korean I-O table is split into sector 19 (bovine cattle, sheep and goats, horse meat products) and sector 20 (meat products nec) of the GSEC3, as shown in Tables 8.18 and 8.19. 38.18 percent and 61.82 percent of sector 35 (slaughtering and meat processing) of the Korean I-O table were assigned to sector 19 (bovine cattle, sheep and goats, horse meat products) and sector 20 (meat products nec) of the GSEC3, respectively, as seen in Table 8.19.

References

Huff, K., R. McDougall, and T. Walmsley (2000). “Contributing Input-Output Tables to the GTAP Data Base,” Technical Paper No. 1, Center for Global Trade Analysis, Purdue University.

Ko, J.-H. and I. Cheong (2002). “Chapter 11.E: Korea”, in Dimaranan, Betina V. and Robert A. McDougall (eds.). Global Trade, Assistance, and Production: The GTAP 5 Data Base, Center for Global Trade Analysis, Purdue University.

Ko, J.-H. (2006). “Chapter 11.D: Korea,” in Dimaranan, Betina V. (ed.). Global Trade, Assistance, and Production: The GTAP 6 Data Base, Center for Global Trade Analysis, Purdue University.

Ko, J.-H. (2008). “Chapter 7.C: Korea,” in Badri Narayanan G. and Terrie L. Walmsley (eds.). Global Trade, Assistance, and Production: The GTAP 7 Data Base, Center for Global Trade Analysis, Purdue University.

Ko, J.-H. (2012). “Korea”, in Badri Narayanan G., Angel Aguiar and Robert McDougall (eds.), Global Trade, Assistance, and Production: The GTAP 8 Data Base, Center for Global Trade Analysis, Purdue University.

Ko, J.-H. (2016). “Chapter 7.K: Korea”, in Aguiar, Angel, Badri Narayanan, & Robert McDougall. “An Overview of the GTAP 9 Data Base.” Journal of Global Economic Analysis 1, no. 1 (June 3, 2016): 181-208. Retrieved from <https://jgea.org/ojs/index.php/jgea/article/view/23>.

Ko, J.-H. (2019). “Chapter 7.K: Korea”, in Aguiar, A., Chepeliev, M., Corong, E., McDougall, R., & van der Mensbrugghe, D. (2019). The GTAP Data Base: Version 10. Journal of Global Economic Analysis, 4(1), 1-27. Retrieved from link.

Ko, J.-H. (2022). “Chapter 8.AE: Korea”, in Aguiar, A., Chepeliev, M., Corong, E. & van der Mensbrugghe, D. (2022). The GTAP Data Base: Version 11. Journal of Global Economic Analysis, 7(2), 1-37. Retrieved from <https://www.jgea.org/ojs/index.php/jgea/article/view/181>

The Bank of Korea (2007). Input-Output Tables of Korea 2003. Seoul.

The Bank of Korea (2009). Input-Output Tables of Korea 2007. Seoul.

The Bank of Korea (2014). Input-Output Tables of Korea 2010. Seoul.

The Bank of Korea (2016). Input-Output Tables of Korea 2014. Seoul.

The Bank of Korea (2019). Input-Output Tables of Korea 2015. Seoul.

The Bank of Korea (2024). Input-Output Tables of Korea 2020. Seoul.

The United Nations Statistical Commission (2009). System of National Accounts 2008.
(<http://unstats.un.org/unsd/nationalaccount/docs/SNA2008.pdf>)

Appendix

Table 8.23: Table A: A mapping of 380 sectors of Korean I-O table to GTAP sectoral classification

GTAP sectoral classification (GSC3)			Korean I-O table sectoral classification
1	pdr	Paddy rice	1 Unmilled rice
			25* Agriculture, forestry and fishing services
2	wht	Wheat	2* Wheat and other crops
			25* Agriculture, forestry and fishing services
3	gro	Cereal grains nec	2* Wheat and other crops
			25* Agriculture, forestry and fishing services
4	v_f	Vegetables, fruit, nuts	3 Pulses
			5 Vegetables
			6 Fruits
			25* Agriculture, forestry and fishing services
5	osd	Oil seeds	11 Seeds
6	c_b	Sugar cane, sugar beet	Not existent
7	pfb	Plant-based fibers	13 Other inedible crops
			25* Agriculture, forestry and fishing services
8	ocr	Crops nec	4 Potatoes
			7 Floricultural crops
			8 Cultivated medicinal herbs
			9 Leaf tobacco
			10 Natural rubber
			12 Other edible crops
			25* Agriculture, forestry and fishing services
9	ctl	Bovine cattle, sheep and goats, horses	15 Beef cattle
			18* Other livestock breeding
			25* Agriculture, forestry and fishing services
10	oap	Animal products nec	16 Swine
			17 Poultry and eggs
			18* Other livestock breeding
			25* Agriculture, forestry and fishing services
11	rmk	Raw milk	14 Dairy farming
			25* Agriculture, forestry and fishing services
12	wol	Wool, silk-worm cocoons	18* Other livestock breeding
13	for	Forestry	19 Forest planting and conservation
			20 Raw timber
			21 Edible forestry products
			22 Misc. forestry products
			25* Agriculture, forestry and fishing services
14	fsh	Fishing	23 Fishing
			24 Aquaculture
			25* Agriculture, forestry and fishing services
15	col	Coal	26 Anthracite
			27 Bituminous coal
16	oil	Oil	28 Crude petroleum
17	gas	Gas	29 Natural gas
18	omn	Minerals nec	30 Iron ores
			31 Other nonferrous metal ores
			32 Sand and stones
			33 Limestone
			34 Misc. nonmetallic minerals

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GTAP sectoral classification (GSC3)			Korean I-O table sectoral classification
19	cmt	Bovine cattle, sheep and goat, horse meat products	35* Slaughtering and meat processing
20	omt	Meat products nec	35* Slaughtering and meat processing
			36 Poultry slaughtering and processing
			37 Prepared meat products
21	vol	Vegetable oils and fats	49* Animal and vegetable fats and oils
22	mil	Dairy products	38 Dairy products
23	pcr	Processed rice	41* Polished rice, barley and others
24	sgf	Sugar	43 Raw sugar
			44 Refined sugar
25	ofd	Food products nec	39 Processed fish and sea foods
			40 Frozen, salted, dried and smoked fish and sea foods
			41* Polished rice and barley and others
			42 Flour and cereal preparations
			45 Starches, glucose, glucose syrup and maltose
			46 Bakery and confectionery products
			47 Noodles
			48 Seasonings
			50 Canned or cured fruits and vegetables
			51 Coffee and tea
			52 Ginseng products
			53 Miscellaneous foodstuffs
			54 Prepared livestock feeds
26	b.t	Beverages and tobacco products	55 Ethyl alcohol for beverages
			56 Distilled spirits (soju)
			57 Beer
			58 Other liquors
			59 Nonalcoholic drinks and ice
			60 Tobacco products
27	tex	Textiles	61 Natural and chemical fiber yarns
			62 Other fiber yarn
			63 Natural and chemical fiber fabrics
			64 Other fiber fabrics
			65 Knitted fabrics
			66 Fiber bleaching and dyeing
			67 Textile products
			68 Non-woven fabric and pelt
			69 Misc. textile products
28	wap	Wearing apparel	70 Textile wearing apparels
			71 Knitted wearing apparels
			72 Leather wearing apparels
			73 Fur wearing apparels and products
			74 Clothing accessories
29	lea	Leather products	75 Leather
			76 Fur
			77 Luggage and handbags
			78 Footwear
			79 Other leather products
30	lum	Wood products	80 Lumber
			81 Plywood

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GTAP sectoral classification (GSC3)			Korean I-O table sectoral classification
			82 Reconstituted and densified wood
			83 Wooden products for construction
			84 Wooden containers
			85 Other wooden products
31	ppp	Paper products, printing	86 Pulp
			87 Printing paper
			88 Other raw paper and paperboard
			89 Corrugated paper and solid fiber boxes
			90 Paper containers
			91 Stationery paper and office paper
			92 Sanitary paper products
			93 Other paper products
			94 Publishing and reproduction of recorded media
32	p_c	Petroleum, coal products	95 Coal products
			96 Naphtha
			97 Gasoline
			98 Jet oil
			99 Kerosene
			100 Light oil
			101 Heavy oil
			102 Liquefied petroleum gas
			103 Refined mixed oil
			104 Lubricants and grease
			105 Misc. petroleum refinery products
33	chm	Chemical products	106 Aliphatic petrochemical basic products
			107 Aromatic petrochemical basic products
			108 Petrochemical intermediate products
			109 Other basic organic chemicals
			110 Industrial gases
			111 Basic inorganic chemicals
			112 Dyes, pigments, and tanning materials
			113 Synthetic resins
			114 Synthetic rubber
			115 Chemical fibers
			117 Fertilizers and nitrogen compounds
			118 Pesticides
			119 Paints, varnishes, and allied products
			120 Printing ink
			121 Soap, detergents and dentifrices
			122 Cosmetics
			123 Adhesives, gelatin and sealants
			124 Photographic chemical products
			125 Misc. chemical products
34	bph	Basic pharmaceutical products	116 Medicaments
35	rpp	Rubber and plastic products	126 Primary plastic products
			127 Plastic products for construction
			128 Plastic products for package
			129 Plastic products for assembly & transport equip.
			130 Misc. plastic products
			131 Tires and tubes
			132 Industrial rubber products

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GTAP sectoral classification (GSC3)			Korean I-O table sectoral classification
36	nmm	Mineral products nec	133 Misc. rubber products
			134 Sheet glass and primary glass products
			135 Glass products for electronics
			136 Industrial glass products except 135
			137 Other glass products
			138 Pottery, china and earthenware for home use
			139 Industrial pottery products
			140 Clay refractories
			141 Clay products for construction
			142 Cement
			143 Ready mixed concrete
			144 Concrete blocks, bricks, and other concrete
			145 Lime, gypsum, and plaster products
			146 Cut stone & stone products
			147 Abrasives
			148 Asbestos and asphalts
37	i_s	Ferrous metals	149 Misc. nonmetallic mineral products
			150 Pig iron
			151 Ferroalloys
			152 Steel ingots and semifinished products
			153 Steel rods and bars
			154 Section steel
			155 Rails and wires
			156 Steel plates (with more than 3 mm thick)
			157 Hot rolled steel sheets
			158 Fabricated wire products
			159 Steel pipe and tubes
			160 Cold rolled steel sheet, strip, and bars
			161 Coated steel plates
			162 Misc. primary iron and steel products
			163 Copper smelting, refining and alloy
			164 Aluminium smelting, refining and alloy
38	nfm	Metals nec	165 Lead and zinc smelting, refining and alloy
			166 Gold and silver ingots
			167 Other nonferrous metal ingots
			168 Primary copper products
			169 Primary aluminium products
			170 Other nonferrous metal castings and forgings,
			171 Metal foundries
			172 Metal products for construction
			173 Structural metal products
			174 Metal tanks and reservoirs
39	fmp	Metal products	175 Industrial boiler and steam generator
			176 Metal forgings and metallurgical products
			177 Metal pressed products
			178 Treatment and coating of metals
			179 Products made of coated metals
			180 Household metallic utensils
			181 Fastening metal products
			182 Hand tools
			183 Bolts, nuts, screws, rivets, and washers

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GTAP sectoral classification (GSC3)			Korean I-O table sectoral classification
40	ele	Computer, electronic and optical equipment	184 Metal cans, barrels, and drums
			185 Other metal products
			186 Semiconductor devices
			187 Integrated circuits
			188 LCD flat display
			189 Misc. electronic display equipment
			190 Printed circuit boards
			191 Electric resistors, storage batteries, electric coils, and transformers
			192 Misc. electronic components
			193 Computers
			194 Computer memory storage
			195 Computer and peripheral equipment
			196 Wire telephone and telegraph equipment
			197 Mobile communications equipment
			198 Misc. communication and broadcasting equipment
			199 Television receiving sets
			200 Film production equipment
			201 Audio and sound equipment
			207 Motors and generators
41	eeq	Electrical equipment	208 Electric transformers
			209 Capacitors and rectifiers
			210 Electric circuit switch and connection equip.
			211 Panel boards and automatic control panels
			212 Batteries
			213 Insulated wires and cables
			214 Household refrigerators and freezers
			215 Cooking appliances and heating apparatus
			216 Other household electronic appliances
			217 Electric bulbs and lamps
			218 Electric lighting fixtures
			219 Misc. electric equipment and supplies
			220 Engines and turbines
42	ome	Machinery and equipment nec	221 Pumps and compressors
			222 Valves
			223 Bearings, gears, gearing and driving elements
			224 Conveyors and conveying equipment
			225 Air-conditioning equipment and industrial refrigeration equipment
			226 Filtering or purifying machinery for liquid and Gases
			227 Office machines and devices
			228 Misc. machinery and equipment of general purpose
			229 Agricultural implements and machines
			230 Construction and mining machines
			231 Metal forming equipment
			232 Metal molds and industrial patterns
			233 Semiconductor machines
			234 Display machines
			235 Food processing machines

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GTAP sectoral classification (GSC3)			Korean I-O table sectoral classification
			236 Textile and apparel machines
			237 Industrial robots
			238 Printing machines
			239 Rubber and plastic surgery equipment
			240 Misc. special purpose equipment
			202 Medical instruments and supplies
			203 Measuring and analytical instruments
			204 Industrial automatic regulators
			205 Cinematograph cameras and projectors
			206 Watches and clocks
43	mvh	Motor vehicles and parts	241 Passenger automobiles
			242 Electric passenger cars
			243 Buses and vans
			244 Trucks
			245 Motor vehicles with special equipment
			246 Trailers and containers
			247 Motor vehicles engines
			248 Motor vehicle chassis, bodies and parts
44	otn	Transport equipment nec	249 Steel ships
			250 Other ships
			251 Ship repairing and ship parts
			252 Railroad vehicles and parts
			253 Aircraft and parts
			254 Motorcycles and parts
			255 Bicycles and parts and misc. transportation
45	omf	Manufactures nec	256 Wood furniture
			257 Metal furniture
			258 Other furniture
			259 Toys and games
			260 Sporting and athletic goods
			261 Musical instruments
			262 Pens, pencils, and other artists' materials
			263 Jewelry and plated ware
			264 Models and decorations
			265 Misc. manufactured products
			266 Manufacturing and processing services
			267 Repairs of industrial machinery and equipment
46	ely	Electricity	268 Water power generation
			269 Thermal power generation
			270 Atomic power generation
			271 In-house power generation
			272 New energy
			273 Renewable energy
47	gdt	Gas manufacture, distribution	274 Manufactured gas supply
48	wtr	Water	275 Steam and hot water supply
			276 Water supply
			277 Treatment of sewage, waste water, and night soil (public)
			278 Treatment of sewage, waste water, and night soil (commercial)
			279 Collection and disposal of wastes (public)

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GTAP sectoral classification (GSC3)			Korean I-O table sectoral classification
			280 Collection and disposal of wastes (commercial)
			281 Resource recycling services
49	cns	Construction	282 Residential building construction
			283 Nonresidential building construction
			284 Building repairs
			285 Road construction
			286 Railroad construction
			287 Breakwater, pier, and harbor construction
			288 Dam, levee, and flood control project
			289 Water main line and drainage project
			290 Land clearing and reclamation, and irrigation
			291 Land leveling and athletic field construction
			292 Environmental purification facilities
			293 Power plant facilities
			294 Industrial plant construction
			295 Miscellaneous construction
50	trd	Trade	296 Wholesale and retail trade
			374 Motor repair services
51	afs	Accommodation, food and service activities	311 General eating places
			312 Misc. eating places
			313 Drinking places
			314 Non-alcohol beverage store
			315 Hotels and other lodging places
52	otp	Land transport and transport via pipelines	297 Railroad passenger and freight transportation
			298 Road passenger transportation
			299 Road freight transportation
53	wtp	Water transport	300 Coastal and inland water transportation
			301 Deep sea transportation
54	atp	Air transport	302 Air transportation
55	whs	Warehousing and support activities	303 Services incidental to road transportation
			304 Services incidental to water transportation
			305 Airports, flying, fields and airport terminal
			306 Cargo loading or unloading operations
			307 Warehousing and storage
			308 Other services incidental to transportation
56	cmn	Information and communication	309 Postal services
			310 Parcel delivery service
			316 Wire communication services
			317 Wireless & satellite communication services
			318 Communication resale & intermediation service
			319 Misc. communication services
			320 Terrestrial broadcasting
			321 Cable and satellite broadcasting
			322 Information provision service
			323 Game software publication
			324 Software development and supply
			325 Misc. IT services
			326 Newspapers and publishing
			327 Movie and audio production and distribution
			328 Showing of movies
57	ofi	Financial services nec	329 Central bank and banking institutions

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GTAP sectoral classification (GSC3)			Korean I-O table sectoral classification
			330 Financial investment institutions
			331 Other financial intermediaries
			335* Services auxiliary to finance and insurance
58	isr	Insurance	332 Life insurance
			333 Pension fund
			334 Casualty insurance
			335* Services auxiliary to finance and insurance
59	rsa	Real estate activities	336* Residential services
			337 Non-residential building rental
			338 Real estate development and supply
			339 Real estate related services
60	obs	Other business services	340 Research and development(public)
			341 Research and development (non-profit)
			342 Research and development (commercial)
			343 Research and development in enterprise
			344 Legal and accounting services
			345 Market survey and management consulting
			346 Advertising services
			347 Architectural and civil engineering services
			348 Engineering-related services
			349 Science and technology services
			350 Misc. special services
			351 Lease of equipment, appliances and intellectual
			352 Maintenance of business facilities and landscape
			353 Manpower supply services
			354 Misc. business services
61	ros	Recreational and other services	366 Culture services (public)
			367 Theatrical producers, bands, and entertainers
			368 Other culture services
			369 Travel agency and travel-related services
			370 Sports services
			371 Amusement and recreation services
			372 Business associations and professional
			373 Religious, political, labor, and other social
			375 Electronic communication devices and home
			376 Barber and beauty shops
			377 Laundry and cleaning services
			378 Domestic services
			379 Other personal services
62	osg	Public administration and defense;	355 Central government
			356 Local government
			357 Social insurance (public)
63	edu	Education	358 Education services (public)
			359 Education services (non-profit)
			360 Education services (commercial)
64	hht	Human health and social work activities	361 Medical and health services (public)
			362 Medical and health services (non-profit)
			363 Medical and health services (commercial)
			364 Social welfare services (public)
			365 Social welfare services (non-profit)

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		GTAP sectoral classification (GSC3)	Korean I-O table sectoral classification
65	dwe	Dwellings 336* Residential services (imputed rent)	