

Appendix Sector classifications

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APPENDIX

1. Coding system for Taiwan-Japan bilateral input-output table (117 Sectors)

Scheme of the Taiwan-Japan Bilateral Input-Output Table

		INT. DEMAND			FINAL DEMAND				EXPORT						
		Japan		Taiwan	Japan		Taiwan				EXPORT				
		A	A	A	E	F	F	F	F	G	G	L	L	Q	X
		J	J	N	T	J	J	N	N	X	J	N	C	W	X
		0	0	0	0	0	0	0	0	0	0	0	0	0	0
		0	n	0	0	0	0	0	0	0	0	0	0	0	0
		1	0	1	0	1	4	0	1	4	0	0	0	1	1
I N T E R M E D I A T E I N P U T S	Japanese products	AJ001 : AJ n AJ900	$A_{n \times n}^{JJ}$	$A_{n \times n}^{JN}$		$F_{n \times 4}^{JJ}$	$F_{n \times 4}^{JN}$						$L_{n \times m}^J$		
	Taiwan's products	AN001 : AN n AN900	$A_{n \times n}^{NJ}$	$A_{n \times n}^{NN}$		$F_{n \times 4}^{NJ}$	$F_{n \times 4}^{NN}$						$L_{n \times m}^N$		
	freight & Insurance	BF001	$B_{1 \times n}^J$	$B_{1 \times n}^N$		$BF_{1 \times 4}^J$	$BF_{1 \times 4}^N$								
	R.O.W. products	CW001 : CW n CW900	$A_{n \times n}^{WJ}$	$A_{n \times n}^{WN}$		$F_{n \times 4}^{WJ}$	$F_{n \times 4}^{WN}$								
	tariff	DT001	$D_{1 \times n}^J$	$D_{1 \times n}^N$		$DF_{1 \times 4}^J$	$DF_{1 \times 4}^N$								
	total	ET001													
	value added	VV001 : VV004 VV900	$V_{4 \times n}^J$	$V_{4 \times n}^N$											
	total input	XX600													

row	sector	column	sector	description
AJ	001	AJ	001	Japan, intermediate sector
:	:	:	:	
AJ	117	AJ	117	
AJ	900	AJ	900	sub total (AJ001-AJ117)
AN	001	AN	001	Taiwan, intermediate sector
:	:	:	:	
AN	117	AN	117	
AN	900	AN	900	sub total (AN001-AN117)
BF	001			freight+insurance
CW	001			intermediate input from the rest of the world*
:	:			
CW	117			
CW	900			sub total (CW001-CW117)
DT	001			import duties and import commodity taxes
ET	900	ET	900	total intermediate input or output
VV	001			value added { (compensation to employees) (operating surplus) (depreciation) (indirect tax-subsidy)
VV	002			
VV	003			
VV	004			
VV	900			sub total (VV001-VV004)
XX	600			total input (ET900+VV900)

<u>row</u>	<u>sector</u>	<u>column</u>	<u>sector</u>	<u>description</u>
		FJ	001	(private consumption)
		FJ	002	Japan, final demand (government consumption)
		FJ	003	(fixed capital formation)
		FJ	004	(change in stocks)
		FJ	900	sub total (FJ001-FJ004)
		FN	001	(private consumption)
		FN	002	Taiwan, final demand (government consumption)
		FN	003	(fixed capital formation)
		FN	004	(change in stocks)
		FN	900	sub total (FN001-FN004)
		FX	900	final demand total (FJ900+FN900)
		GJ	900	Japan total demand (AJ900+FJ900)
		GN	900	Taiwan total demand (AN900+FN900)
		LC	001	export to China
		LH	001	export to Hong Kong
		LI	001	export to Indonesia
		LK	001	export to Korea
		LM	001	export to Malaysia
		LP	001	export to Philippines
		LS	001	export to Singapore
		LT	001	export to Thailand
		LU	001	export to USA
		LW	001	export to the rest of the world**
		LX	900	sub total (LC001-LW001)
		QX	001	statistical discrepancy
		XX	600	total output (GJ900+GN900+LX900+QX001)

*CW excludes only Taiwan and Japan.

**LW excludes China, Hong Kong, Indonesia, Korea, Malaysia, Philippines, Singapore, Thailand, USA, Taiwan and Japan.

2. Bilateral uniform i-o sector classifications (BUIO)

BUIO 117 sectors		Aggregation of 50 Sectors		Aggregation of 7 Sectors	
CODE NO.	DESCRIPTION	CODE NO.	DESCRIPTION	CODE NO.	DESCRIPTION
001	Paddy rice	01	Paddy rice	01	Agriculture & livestock, Forestry, and Fishery
003 004 005	Sugarcane Other special crops Horticultural crops	02	Sugarance		
002	Other common crops	03	Other crops		
006 007	Hogs Other livestock	04	Livestock		
009	Forestry	05	Forestry		
010	Fishery	06	Fishery		
011	Coal	07	coal		
012	Crude oil & natural gas	08	Crude oil & natural gas	02	Mining & quarrying
013 014 015	Metallic minerals Salt Other non-metallic minerals	09	Other minerals		
016	Slaughtering & by-products	10	Slaughtering & by-products		
018 019	Grain milled products Rice	11	Rice & grain milled products	03	Manufacturing
020	Sugar	12	Sugar		
022	Canned foods	13	Canned foods		
017 021 023 024 025	Edible vegetable oil & by-products Animal feeds Frozen foods Monosodium glutamato Misc. food products	14	Misc. food products		
026 027	Non-alcoholic beverages Alcoholic beverages	15	Beverages		
028	Tobacco	16	Tobacco		
029 030	Cotton & cotton fabrics Wool & worsted fabrics	17	Cotton, wool & fabrics		
031	Artificial fabrics and silk	18	Artificial fabrics and silk		
032 033 034 035	Knitted garments Dyeing of textiles Other garments Misc. fabric apparel	19	Garments, misc. fabric products & dyeing		
036	Leather & leather products	20	Leather & leather products		
037 038	Lumber Plywood	21	Lumber & plywood		
039 040	Wood, bamboo & rattan products Non-metallic furniture	22	Products of wood, bamboo & rattan		
041 042 043	Pulp, paper, & paper board Paper products Printing, publishing & bookbinding	23	Paper, paper products, printing & publishing		
044	Petrochemical intermediate material	25	Petrochemical intermediate material		
045	Other industrial chemicals	26	Other industrial chemicals		
047 048	Synthetic fibers Other artificial fibers	28	Artificial fibers		
049 050	Plastics (synthetic resins) Other chemicals	29	Plastics & plastic products		
051 052	Medicines Misc. chemical manufactures	30	Misc. chemical		
046	Chemical fertilizers	27	Chemical fertilizers		
055 056	Rubber products Plastic products	24	Rubber products		
053 054	Petroleum refining products Coal products	31	Petroleum refining products		

BUJO 117 sectors		Aggregation of 50 Sectors		Aggregation of 7 Sectors					
CODE NO.	DESCRIPTION	CODE NO.	DESCRIPTION	CODE NO.	DESCRIPTION				
059 060 061	Cement Cement products Misc. non-metallic mineral products	32	Cement & cement products	03	Manufacturing				
057 058	Pottery & porcelain Glass & glass products	33	Misc. non-metallic mineral products						
062 063	Pig iron & crude steel Primary iron & steel products	34	Steel & iron						
066 067	Iron & steel products Misc. metallic products	35	Iron & steel products						
064 065	Aluminum Misc. metals	36	Non-ironic metals & products						
068 069 070	General industrial machinery Other machinery Machinery parts, repair maintenance	37	Machinery						
071	Household electrical appliances	38	Household electrical appliances						
073	Electronic products	39	Electronic products						
072	Electrical machinery & apparatus	40	Electrical machinery & apparatus						
074 075 076	Shipbuilding Motor vehicles Other transport equipments	41	Transport equipments						
077 078	Precision instruments & apparatus Other manufactures	42	Misc. manufactures						
079	Electricity	44	Electricity			04	Electricity, gas & city water supply		
080 081	Gas City water	45	Gas & city water			05	Construction		
082 083 084 085	Residential building construction Non-residential building construction Public works Other construction	43	Construction						
090 091 092 093 094 095	Railway transportation Other land transportation Water transportation Air transportation Supporting services to transportation Warehousing	46	Transportation & warehousing					06	Trade and transport
086 087	Trade Domestic wholesale trade	48	Trade						
096	Communications	47	Communications	07	Services				
008 088 089 097 098 099 100 101 102 103 104 105 106 107 108 109 110 111 112 113 114 115 116	Agricultural services Food & beverage services Hotel services Finance Insurance Housing * land brokerage Dwelling services Data processing & information services Other business services Machinery & equipment rental & leasing Public administration services Environmental sanitary services Educational training services Mass medical services Scientific research & service Medical & health services Social welfare services Services of civil association Other social services Recreation culture services Repair services Household services Other personal services	49	Services						
117	Undistributed	50	Undistributed						

3. Bridge of the "BUIO-Japan i-o sector classification (JIO)-Taiwan i-o sector classification (NIO)"

BUIO (117 SECTORS)		Japan I-O (408 SECTORS)		Taiwan I-O (487 SECTORS)	
CODE NO.	DESCRIPTION	CODE NO.	DESCRIPTION	CODE NO.	DESCRIPTION
001	Paddy rice	0111-01	Rice	00110 00190	Paddy rice Straw & other by-products
002	Other common crops	0111-02 0112-01 0111-03 0112-02 0116-01	Barley and wheat Potatoes Miscellaneous cereals Pulses Field crops for feed	00210 00220 00230 00250 00240 00430 00490 00290	Wheat Sweet-potatoes Corn Misc. beans & crops Soybeans Peanuts By-products By-products
003	Sugarcane	0115-02	Field crops for sugar	00310 00390	Sugarcane for sugar manufacturing By-products
004	Other special crops	0115-03 0116-02 0115-01 0115-09 0116-09	Crops for beverages Leaf tobacco Field crops for edible oil Other edible field crops Other inedible field crops	00410 00420 00440 00460 00451 00459 00940	Tea leaves Tobacco leaves Misc. crops for oil-making or beverage purpose Other crops for processing Raw cotton Misc. fiber crops Natural rubber
005	Horticultural crops	0114-01 0113-01 0116-04 0116-03	Fruits Vegetables Flowers Seeds	00511 00512 00513 00519 00590 00520 00530 00540 00560 00550	Bananas Pineapples Citrus fruits Other fruits By-products Mushrooms Asparagus Vegetables Other horticultural crops Flowers
006	Hogs	0121-04	Pig raising	00610 00620 00690	Hogs (exc. piglets) Piglets By-products
007	Other livestock	0121-05 0121-09 0121-01 0121-02 0121-03 0122-01	Beef cattle raising Other livestock raising Dairy farming Egg hen Fowls, n.e.c. Sericulture	00710 00720 00760 00790 00730 00740 00750	Cattle Wool & hair, untreated Other poultry Other livestock, hunting prod. By-products Milk Eggs Chicken
008	Agricultural services	0131-02 0131-01	Agricultural services (except veterinary) Veterinary service	00890 00810 00820 00830	Other agricultural services Services of draft animals Services of agricultural machines Irrigation
009	Forestry	0212-01 0213-01 0211-01	Logging Cultivated and uncultivated forest products (inc. hunting) Forest planting and conservating	00910 00920 00930 00990 00950 00960	Timber Firewood Bamboos Other forest prod. & by-products Seedlings and reforestation Stumpage price
010	Fishery	0311-04 0311-01 0311-03 0311-02 0312-01 0312-02 1113-01 1113-09	Sea-shore water culture Coastal water fishing Ocean water fishing Off-shore water fishing Inland water fishing Inland water culture Frozen fishes and shellfishes Other processed seafoods	01010 01020 01030 02313	Aquaculture Coastal and off-shore fisheries Ocean-going fisheries Frozen fishery products
011	Coal	0711-01	Coal mining	01100	Coal
012	Crude oil & natural gas	0721-01 0731-01	Crude petroleum Natural gas	01210 01220 01230	Crude oil Natural gas Geothermal energy
013	Metallic minerals	0611-01 0612-01	Iron and ore mining Non-ferrous metal ores	01310 01320 01330 01390	Iron minerals Copper minerals Aluminum minerals Other metallic minerals
014	Salt	1119-01	Salt	01420 01410 01490	Refined salt Unrefined salt By-products

BUJO (117 SECTORS)		Japan I-O (408 SECTORS)		Taiwan I-O (487 SECTORS)					
CODE NO.	DESCRIPTION	CODE NO.	DESCRIPTION	CODE NO.	DESCRIPTION				
015	Other non-metallic minerals	0621-01	Limestone	01510	Sand & clays for ceramics				
		0622-02	Crushed stones	01520	Sand & gravel for construction				
		0622-01	Gravel and quarry	01530	Stone for building purpose				
		0629-09	Other non-metal ores	01590	Other non-metallic mineral products				
016	Slaughtering & by-products	1111-01	Slaughtering and meat processing	01540	Minerals for chemicals & fertilizers				
				0621-09	Other materials for ceramics	01610	Pork		
		1112-03	Animal oil and fat	01620	Beef				
017	Edible vegetable oil & by-products	1115-07	Vegetable oil and waste	01630	Other meats				
				01640	Animal hides & skins				
				01690	By-products				
				02312	Frozen meats				
				01710	Soybean oil				
018	Grain milled products	1114-02	Flour manufacturing	01720	Soybean cake, bran & scraps				
				1115-05	Starch	01730	Peanut oil		
				01740	Peanut cake, bran & scraps				
019	Rice	1114-01	Grain polishing	01790	Other edible oils, fats & by-products				
				01810	Wheat flour				
020	Sugar	1115-04	Sugar	01890	Wheat bran & other by-product				
				1115-06	Glucose and isomerized sugar	01820	Other milling starch & flakes		
021	Animal feeds	1131-01	Feeds for animal and poultry	01920	Polished rice				
				1113-05	Fish oil and scrap	01990	Rice bran & other by-products		
				022	Canned foods	1112-01	Canned or bottled meat products	01910	Brown rice
								1113-03	Canned or bottled seafoods
023	Frozen foods	1115-09	Other vegetables and fruits products	02020	Brown sugar				
				1129-03	Ice manufacturing	02030	Syrup & molasses		
				1119-04	Frozen cooked foods	02090	Bagasse & other by-products		
				024	Monosodium glutamate	1119-02	Flavoring	02100	Animal feeds
								02260	Canned meat & fish
025	Misc. food products	1112-02	Processed meat products	02290	Other canned foods (exc. canned milk)				
				1112-04	Drinking mild and dairy products	02210	Canned pineapple		
				1115-02	Bread and confectionery	02220	Canned mushroom		
				1129-01	Finished tea and coffee	02230	Canned asparagus		
				1119-09	Other foodstuffs	02240	Canned bamboo shoot		
				1115-01	Noodles	02250	Canned tomato		
				1119-03	Retort foods	02295	By-products		
				1113-02	Salted, dried, and smoked seafoods	02311	Frozen vegetables & fruit		
				1113-04	Kneaded fish meat	02570	Dehydrated & preserved foods		
				026	Non-alcoholic beverages	1129-02	Soft drinks	02320	Ice
02314	Frozen prepared foods								
027	Alcoholic beverages	1121-02	Beer	02319	Other frozen foods				
				1121-09	Other liquor	02410	Monosodium glutamate		
				1121-03	Ethyl alcohol for liquor manufacturing	02420	Glutamic acid		
				1121-01	Refined sake	02550	Seasonings (exc. monosodium glutamate)		
				1121-04	Whisky and brandy	02510	Processed fish & meats (exc. canned & frozen)		
				028	Non-metallic mineral products	1121-02	Limestone	02520	Dairy products
								1121-09	Other liquor
				029	Metallic mineral products	1121-02	Limestone	02562	Refined tea
1121-09	Other liquor	02533	Bakery mut & powder						
030	Metallic mineral products	1121-02	Limestone	02561	Unrefined tea				
				1121-09	Other liquor	02532	Cooked grain		
031	Metallic mineral products	1121-02	Limestone	02540	Soybean products				
				1121-09	Other liquor	00770	Honey		
032	Metallic mineral products	1121-02	Limestone	02590	Misc. foods				
				1121-09	Other liquor	02610	Carbonated water		
033	Metallic mineral products	1121-02	Limestone	02620	Fruit & vegetable juice				
				1121-09	Other liquor	02690	Distilled & mineral water		
034	Metallic mineral products	1121-02	Limestone	02710	Beer				
				1121-09	Other liquor	02720	Other liquors		
035	Metallic mineral products	1121-02	Limestone	02790	Other alcoholic beverages & by-products				
				1121-09	Other liquor				

BUIO (117 SECTORS)		Japan I-O (408 SECTORS)		Taiwan I-O (487 SECTORS)	
CODE NO.	DESCRIPTION	CODE NO.	DESCRIPTION	CODE NO.	DESCRIPTION
028	Tobacco	1141-01	Tobacco	02810 02820 02890	Cigarettes Processed tobacco Other tobacco products & by-products
029	Cotton & cotton fabrics	1511-02 1512-01	Cotton-yarn Cotton and staple fibers fabrics (inc. fabrics of discontinuous synthetic fibers)	02910 02920 02930 02990	Cotton yarn Cotton fabrics Blended cotton yarn & fabrics Other cotton fabrics
030	Wool & worsted fabrics	1511-04 1512-03	Woolen yarn Woolen woven fabrics	03010 03020 03030	Wool tops Woolen yarn & knitting wool (incl. blended fibres) Woolen fabrics (incl. blended fibres)
031	Artificial fabrics and silk	1511-03 1512-02 1519-09 1511-01 1511-09	Synthetic fiber yarn Silk and artificial silk fabrics (inc. fabrics of continuous synthetic fibers) Other fabricated textile products Silk-reeling Other fiber yarns	03110 03120 03150 03130 03140 03160 03410 03499	Yarn and thread of regenerated fibres Yarn and thread of synthetic fibres Artificial fabrics Blended yarn & thread of regenerated & synthetic fibres Other yarn and thread of artificial fabrics Gimped yarn Silk, linen & other fabrics Fabric scrap and waste
032	Knitted garments	1513-01	Knit fabrics	03200	Knitted garments
033	Dyeing of textiles	1514-01	Yarn and fabric dyeing and finishing	03300	Dyeing of textiles
034	Other garments	1521-01	Wearing apparel	03500	Other wearing apparel
035	Misc. fabric apparel	1522-01 1529-01 1529-09 1519-01 1519-03 1512-09 1519-02	Apparel accessories Cotton and beddings Other ready-made textile products Straw and rush products Carpets and floor mats Other woven fabrics Ropes and nets	03610 03620 03730 03630 03690 03699 03420 03490	Wearing apparel & accessories (exc. footwear & headgear) Footwear & headgear (exc. rubber & plastic products) Leather apparel Daily textile products Other textile products Used wearing apparel & accessories Textile products for industrial purposes Others
036	Leather & leather products	2412-01 2411-01 2412-02	Leather and fur products (exc. wearing apparel) Leather footwears Luggage, bags and miscellaneous leather products	03710 03720 03790	Leather Leather footwear Other leather products
037	Lumber	1611-01 1611-03	Sawn lumber Wooden chips	03810 03899	Lumber Used wood & lumber waste
038	Plywood	1611-02	Plywood	03910 03920 03930	Unfinished plywood Processed plywood Reconstituted wood
039	Wood, bamboo & rattan products	1619-09 1711-02	Other wooden products Wooden fixtures	04010 04020 04099	Wood products Bamboo & rattan products Used wood, bamboo & rattan products
040	Non-metallic furniture	1711-01	Wooden furniture and accessories	04110 04190 04199	Wood, bamboo & rattan furniture Other non-metallic furniture Used non-metallic furniture
041	Pulp, paper, & paper board	1811-01 1812-01 1813-01 1813-02 1813-03 1829-01	Pulp Machine-made paper and Japanese paper Paper board Corrugated card board Coated paper and paper converted for construction use Cellophane	04210 04220 04299	Pulp Paper and paperboard Used paper and waste paper
042	Paper products	1821-09 1821-01 1829-09	Other paper containers Corrugated cardboard boxes Other pulp, paper and converted paper products	04310 04320 04390	Paper bags Paperboard boxes Other paper products

BUIO (117 SECTORS)		Japan I-O (408 SECTORS)		Taiwan I-O (487 SECTORS)	
CODE NO.	DESCRIPTION	CODE NO.	DESCRIPTION	CODE NO.	DESCRIPTION
043	Printing, publishing & bookbinding	1911-01 1911-03 1911-02	Newspapers Publishing Printing, engraving and book-binding	04410 04420 04490	Newspapers Books & magazines Other printed matter & bookbinding
044	Petrochemical intermediate material	2031-01 2031-02 2039-02 2032-02 2032-01 2011-01 2039-01 2039-03	Petrochemical basic products Petrochemical aromatic products Methane derivatives Cyclic intermediates Aliphatic intermediates Ammonia Coal tar products Oil and fat industrial chemicals	04511 04512 04550 05450 04513 04521 04522 04530 04580 04590 04542 04541 04560 04570	Ethylene Propylene Ethylene glycol Kerosene Benzene Methanol Formaldehyde Pure terephthalic acid & dimethyl terephthalate Caprolactam Other petrochemical raw materials Styrene Vinyl chloride monomer Acrylonitrile Ammonia
045	Other industrial chemicals	2029-01 2021-01 2029-09 2029-03 2029-02	Sulfuric acid Industrial soda chemicals Other inorganic basic chemicals Compressed gas and liquefied gas Inorganic pigment	04610 04620 04630 04690 05190 04641 04642 04649	sulfuric acid Alkalies, chlorine & manufactures thereof Phosphoric & nitric acid Misc. industrial chemicals Other chemical materials Oxygen Nitrogen Other gas
046	Chemical fertilizers	2011-02 2011-03 1131-02	Elemental fertilizers Combined and compound fertilizers Organic fertilizers, n.e.c.	04711 04712 04713 04720 04730 04740 04790	Urea Ammonium sulfate Other nitrogenous fertilizers Phosphatic fertilizers Potassic fertilizers Compound fertilizers Other chemical fertilizers
047	Synthetic fibers	2051-02	Synthetic fiber	04810 04820 04830 04840 04890	Nylon fiber Polyester fiber Acrylic fiber Stotch synthetic filaments Other synthetic fibers
048	Other artificial fibers	2051-01	Artificial silk and staple fibres	04910 04990	Rayon fiber Others (exc. inorganic fibers)
049	Plastics (synthetic resins)	2041-09 2041-02 2041-03 2041-01	Other resin Thermoplastic resin High functionality resin Thermo-setting resin	05010 05050 05090 05020 05030 05040 05060 05070 05081 05082 05083 05099	Polyvinyl chloride Acrylonitrile-butadiene-styrene terpolymer (ABS resins) Other synthetic resins Polyethylene Polypropylene Polystyrene Polyurethane resins Unsaturated polyester resins Phenol resins Urea resins Melamine resins Scrap & waste
050	Other chemicals	2033-01	Synthetic rubber	05120	Synthetic rubber
051	Medicines	2061-01 1519-04	Medicaments Textile for medical use	05210 05220 05230	Chinese medicines Pharmaceutics Other products for medical use
052	Misc. chemical manufactures	2079-01 2072-01 2039-05 2039-09 2079-09 2071-01 2071-02	Agricultural chemicals Paints, varnish and lacquer Synthetic dye Other organic basic chemicals Other final chemical products Soap, synthetic detergents and surface active agents Cosmetics, toilet preparations and dentifrices	05310 05320 05342 05330 05341 05349 05359 05130 05351 05352 05353	Pesticides and herbicides Coating (incl. paints) Solvent Dyestuffs, pigments & printing inks Alcohols Misc. chemical manufactures for industrial use Misc. chemical products for household use Sophisticated chemicals Soaps Synthetic detergents and washing preparations Cosmetics

BUIO (117 SECTORS)		Japan I-O (408 SECTORS)		Taiwan I-O (487 SECTORS)	
CODE NO.	DESCRIPTION	CODE NO.	DESCRIPTION	CODE NO.	DESCRIPTION
		2079-02 2073-01 2039-04 2072-02	Gunpowder Photographic sensitive materials Plasticizers Printing ink	05360 05390	Explosives Other chemicals
053	Petroleum refining products	2111-01 2121-02	Petroleum refinery products Paving materials	05410 05420 05340 05440 05460 05470 05480 05492 05491	Gasoline Diesel fuel Aviation fuel Fuel oils Lubricants Naphtha Refinery gases Other petroleum refineries Asphalt
054	Coal products	2121-01	Coal products	05500	Coke & other coal products
055	Rubber products	2311-01 2319-01 2319-09	Tires and inner tubes Rubber footwears Other rubber products	05610 05620 05630 05640 05650 05690 05110 05699	Materials of refined & regenerated rubber Inner rubber tubes Automobile tires Other tires Rubber footwear Other rubber products Reproduced rubber Scrap & waste
056	Plastic products	2211-01 2319-02	Plastic products Plastic footwear	05710 05720 05730 05740 05760 05770 05790 05750	Plastic leather Plastic cloth & film Plastic tubes & plates Plastic bags Plastic apparel & clothing accessories FRP products Other plastic products Plastic footwear
057	Pottery & porcelain	2531-01	Ceramic wares	05810 05820 05830	Ceramic building materials Ceramics for household use Ceramics for industrial or experimental use
058	Glass & glass products	2511-01 2519-09 2512-01	Sheet glass and safety glass Other glass and glass products Glass fiber and glass fiber products	05910 05920 05930 05940 05999	Glass plates Glassware for industrial or experimental use Glassware for household use Glass fiber and glass fiber products Used bottles & broken, waste glass products
059	Cement	2521-01	Cement	06000	Cement
060	Cement products	2522-01 2523-01	Ready-mixed concrete Cement products	06110 06190	Ready-mixed concrete Misc. cement products
061	Misc. non-metallic mineral products	2599-02 2599-09 2599-04 2599-03 2599-01	Other structural clay products Miscellaneous ceramics stone and clay products Abrasives Carbon and graphite products Clay refractories	06210 06220 06230 06290 06299	Red bricks Ceramic products for construction Misc. non-metallic mineral products for construction Other non-metallic mineral products Scrap & waste
062	Pig iron & crude steel	2611-01 2611-02 2611-03 2612-01	Pig iron Ferro alloy Crude steel Iron scrap	06310 06320 06330 06340 06350 06398 06399	Pig iron Ferro-alloys Steel ingots Alloy steel ingots Other special steel ingots Ships designated for scrapping Scrap & waste
063	Primary iron & steel products	2623-02 2621-01 2622-01 2631-01 2623-01 2631-02 2631-03 2631-04 2631-09	Coated steel Hot rolled steel Steel pipes and tubes Cast and forged steel Cold-finished steel Cast iron pipes and tubes Cast and forged materials (iron) Iron and steel shearing and slitting Other steel products	06410 06440 06420 06430 06450 06460 06470 06480 06490 06499	Special steel materials Steel sheets Section steel Steel plates Steel rods Steel bars Steel pipes & tubes Wrought and cast iron and steel products Other iron and steel materials Scrap & waste

BUJO (117 SECTORS)		Japan I-O (408 SECTORS)		Taiwan I-O (487 SECTORS)	
CODE NO.	DESCRIPTION	CODE NO.	DESCRIPTION	CODE NO.	DESCRIPTION
064	Aluminum	2722-02	Rolled aluminum products	06520	Aluminum plates, sheets, tubes & rods
		2722-03	Non-ferrous metal castings and forgings	06530	Aluminum foil
		2711-04	Aluminum	06540	Aluminum castings
065	Misc. metals	2711-01	Copper	06590	Other aluminum materials
		2711-09	Other non-ferrous metals	06510	Aluminum ingots
		2712-01	Non-ferrous metal scrap	06599	Aluminum scrap
		2711-02	Lead (inc. regenerated lead)	06610	Copper
		2711-03	Zinc (inc. regenerated zinc)	06620	Copper castings
		2722-04	Nuclear fuels	06690	Misc. metals
066	Iron & steel products	2812-01	Metal products for architecture	06699	Scrap & waste
		2891-01	Gas and oil appliances, heating and cooking apparatus	06730	Iron & steel products for industrial use
		3019-03	Machinists' precision tools	06740	Iron & steel products for household use
		2811-01	Metal products for construction	06790	Other iron and steel manufactures
		2899-01	Bolts, nuts, rivets and springs		
		2899-02	Metal containers, fabricated plate and sheet metal		
		2899-03	Plumber's supplies, powder metallurgy products and tools		
		1711-03	Metallic furniture and accessories	06710	Tin cans
				06720	Steel cable
				06799	Repair of iron & steel products
067	Misc. metallic products	2722-01	Rolled and drawn copper and alloys	06810	Aluminum windows & doors
		2899-09	Other metal products	06890	Misc. aluminum products
				06750	iron & steel furniture
		2722-09	Other non-ferrous metal products	06910	Copper products
068	General industrial machinery	3011-01	Boilers and turbines	06990	Other base metallic products
		3011-02	Engines	06995	Surface treating of metal products
		3019-01	Pumps and compressors	07010	Motive-power machinery
		3012-01	Conveyors	07020	Pumps and compressors
		3024-01	Metal machine tools	07030	Conveying equipment
		3032-10	Repairs of general machinery	07040	Machine tools
		3029-03	Food processing machinery	07395	Repair & maintenance
		3029-02	Textile machinery	07110	Food manufacturing machinery
		3029-09	Other special industrial machinery	07120	Textile machinery
		3022-01	Chemical machinery	07130	Woodworking machinery
		3411-09	Other industrial heavy electrical equipment	07140	Paper manufacturing machinery
		3024-02	Metal processing machinery	07190	Other industrial machinery
		3023-01	Industrial robots	07150	Chemical processing machinery
				07160	Metal refining machinery
		069	Other machinery	3029-01	Agricultural machinery
3021-01	Mining, civil engineering and construction machinery			07191	Parts
3111-01	Office machines			07210	Agricultural machinery
3019-02	Sewing machines and knitting machinery			07220	Mining machinery
3112-01	Machinery for service industry			07230	Construction machinery
				07240	Office machinery
				07250	Household machinery
				07290	Other machinery
070	Machinery parts, repair maintenance	3031-01	Metal mold	07291	Parts
		3019-09	Other general industrial machinery and equipment	07310	Moulding tools
		3031-02	Bearings	07320	gears & switch machinery
		3031-09	Other general machines and parts	07330	Bearings & seals
				07390	Parts
				07091	Parts
				07095	Repair & maintenance
				07195	Repair & maintenance
				07295	Repair & maintenance
071	Household electrical appliances	3211-09	Other household electric appliances	07410	Refrigerators
				07420	Laundry equipment
				07430	Electric fans
				07440	Air-conditioning equipment
				07490	Other household appliances
				07450	Lighting equipment
				07460	Electric heating equipment
		3421-02	Electric lighting fixtures	07491	Parts

BUIO (117 SECTORS)		Japan I-O (408 SECTORS)		Taiwan I-O (487 SECTORS)			
CODE NO.	DESCRIPTION	CODE NO.	DESCRIPTION	CODE NO.	DESCRIPTION		
072	Electrical machinery & apparatus	3411-01	Rotating electrical machinery	07510	Electrical machinery		
		3431-09	Parts and accessories of electric and communication equipment	07520	Electric transmission & distribution equipment		
		2721-01	Electrical wires and cables	07530	Wires & cables		
		3013-01	Refrigerators and air conditioning apparatus	07540	Electrical equipment for special purposes		
		3421-03	Batteries	07550	Batteries		
		3421-09	Other weak electrical equipment	07590	Other electrical materials		
		3421-05	Wiring devices and supplies				
		3421-06	Electrical equipment for internal combustion engines				
		3411-02	Relay switches and switchboards				
		3421-04	Electric bulbs				
073	Electronic products	3211-02	Radio and television sets	07610	Radios & record players		
		3211-03	Magnetic recording and playback equipment (VTR)	07620	Television sets		
		3211-01	Electric audio equipment	07630	Video tape recorders		
		3321-01	Wired communication equipment	07640	Tape recorders		
		3321-02	Radio communication equipment	07651	Telephone sets		
		3311-01	Electronic computing equipment	07659	Other telephone products & equipment		
		3311-02	Electronic computing equipment accessories	07660	Electronic calculators		
		3321-09	Other communication equipment	07671	Computers		
		3341-01	Semiconductor devices and integrated circuits	07672	Computer peripheral equipment		
		3411-03	Other electricity transmission and distribution apparatus	07690	Other electronic appliances		
		3431-02	Parts and accessories of electric audio equipment	07691	Electronic active components		
		3432-10	Repair of electric machinery	07692	Electronic passive components		
		3431-01	Electron tubes	07693	Other electronic components & parts		
		074	Shipbuilding	3611-01	Steel ships	07710	Merchant vessels
				3611-02	Other ships	07790	Other ships
		3611-03	Internal combustion engine for vessel	07791	Parts, accessories		
		3611-10	Repair of ships	07795	Repair & maintenance		
075	Motor vehicles	3521-01	Trucks, buses, and other motor vehicles	07810	Automobiles		
		3531-01	Two wheel motor vehicles	07840	Chassis		
		3541-01	Motor vehicle bodies	07820	Motorcycles		
		3541-03	Motor vehicle parts and accessories	07830	Auto bodies		
		3551-10	Repair of motor vehicles	07891	Parts & accessories		
		3541-02	Internal combustion engines for motor vehicles, and their parts	07895	Repair & maintenance		
		3511-01	Passenger cars	12010	Repair services to motor vehicles & motorcycles		
076	Other transport equipments	3622-01	Aircrafts	07910	Aircraft		
		3621-01	Railroad cars	07920	Railway equipment		
		3629-01	Bicycles	07930	Bicycles		
		3629-09	Other transportation equipment	07990	Other transport equipment		
		3621-10	Repair of railroad cars				
		3622-10	Repair of aircrafts				
		3629-10	Repair of other transportation equipment				
		077	Precision instruments & apparatus	3719-03	Medical instruments	08010	Medical instruments & apparatus
		3719-02	Analytical instruments, testing machines and measuring instruments	08020	Scientific measuring instruments		
		3711-01	Cameras	08030	Photographic instruments		
		3712-01	Watches and clocks	08040	Optical instruments		
		3719-10	Repair of precision instruments	08060	Clocks & watches		
		3331-01	Applied electronic equipment	08090	Other precision instruments & apparatus		
		3421-01	Electric measuring instruments	08050	Spectacles		
		3719-01	Physical and chemical instruments				
		3711-09	Other photographic and optical instruments				

BUIO (117 SECTORS)		Japan I-O (408 SECTORS)		Taiwan I-O (487 SECTORS)	
CODE NO.	DESCRIPTION	CODE NO.	DESCRIPTION	CODE NO.	DESCRIPTION
078	Other manufactures	3919-03	Small personal adornments	08110	Jewellery, shell & bone articles
		3919-01	Musical instruments and record disks	08170	Other cleaning, clothing accessories & dialy articles
		3911-02	Sporting and athletic goods	08120	Musical instruments
		3911-01	Toys	08130	Sporting goods
		3919-02	Writing instruments and stationery	08140	Toys & recreational items
		3919-09	Miscellaneous manufacturing products	08150	Stationery
079	Electricity	5111-01	Electric power (atomic power)	08200	Electricity
		5111-02	Electric power (thermal power)		
		5111-03	Electric power (water power, etc.)		
		5111-04	Self power generation		
080	Gas	5121-01	Gas supply	08300	Gas
081	City water	5211-01	Water supply	08410	City water
		5122-01	Steam and hot water supply	08420	Steam & hot water
		5211-02	Industrial water supply		
082	Residential building construction	4111-01	New residential construction (wooden)	08510	Homes built by construction firms
		4111-02	New residential construction (non-wooden)	08520	Homes by own construction
		4121-01	Repair of buildings	08595	Maintenance
083	Non-residential building construction	4112-01	New non-residential construction (wooden)	08610	Nonresidential building built by construction firms
		4112-02	New non-residential construction (non-wooden)	08620	Nonresidential building built by own construction
084	Public works	4132-01	Railway construction	08710	Railway construction
		4131-01	Public utility construction and maintenance of roads	08720	Road construction
		4131-02	Public utility construction and maintenance of rivers, drainers and others	08730	Harbour construction
				08740	Airport construction
08750	Hydraulic engineering				
085	Other construction	4132-02	Electric utility facilities construction	08810	Construction of outdoor electric transmission & distribution lines
		4132-09	Other civil engineering and construction	08790	Other public facilities
				08830	Construction of city water supply facilities
				08840	Construction of oil & gas storage & distribution facilities
		4132-03	Telecommunication facilities construction	00850	Installation of machinery & Electrical equipment
				00860	Gardening works
08820	Telecommunication lines construction				
08870	Painting, coating, mounting & matting				
08890	Other construction				
086	Trade	6111-01	Wholesale trade	08900	Domestic wholesale trade
				09100	Import & export trade
087	Domestic wholesale trade	6112-01	Retail trade	09010	General retail trade
088	Food & beverage services	8612-01	General eating and drinking places (except coffee shops)	09200	food & beverage services
089	Hotel services	8613-01	Hotel and other lodging places	09300	Hotel services
090	Railway transportation	7111-01	National railway transport (except passengers of exceptional reduced fare line)	09410	Passenger transportation
		7112-01	National railway transport (passengers of exceptional reduced fare line)	09420	Freight transportation
		7113-01	Local railways and tramway transport	09490	Supporting services to railway transportation
091	Other land transportation	7121-01	Bus transport	09510	Passenger transportation
		7122-01	Road freight transport		
		7179-01	Road transport facilities services		
		7121-02	Limousine and taxi transport		
09520	Freight transportation				
09530	Supporting services to land transportation				

BUJO (117 SECTORS)		Japan I-O (408 SECTORS)		Taiwan I-O (487 SECTORS)	
CODE NO.	DESCRIPTION	CODE NO.	DESCRIPTION	CODE NO.	DESCRIPTION
092	Water transportation	7142-01	Coastal and inland water transport	09610	Passenger transportation
		7141-01	Ocean transport	09620	International transportation
		7143-01	Transport services in harbor	09630	Domestic freight transportation
		7179-03	Services related to water transport (industrial)	09640	Supporting services to water transportation
		7179-02	Services related to water transport (public)		
093	Air transportation	7151-01	Air transport	09710	Passenger transportation
		7179-04	Services related to air transport (public)	09720	Freight transportation
		7179-05	Services related to air transport (industrial)	09730	Supporting services to air transportation
094	Supporting services to transportation	7179-09	Other transport services	09800	Services incidental to transport
		7122-02	Railway forwarding		
		8514-01	Renting and leasing of motor vehicles		
		7171-01	Packing		
095	Warehousing	7161-01	Storage facilities services	09900	Warehousing
096	Communications	7312-01	Domestic telecommunication service	10010	Telegram & telephone
		7311-01	Postal service	10020	Postal services
		7312-02	International telecommunication service		
		7319-09	Other services related to communication		
097	Finance	6211-01	Financial service	10100	Finance
098	Insurance	6212-01	Life insurance	10210	Life insurance
		6212-02	Casualty insurance	10220	Property insurance
		8312-01	Social insurance (public)	10230	Social insurance
		8312-02	Social insurance (private, non-profit)	10290	Other insurance
099	Housing & land brokerage	6411-01	Real estate agencies and managers	10400	Housing & land brokerage
100	Dwelling services	6421-01	House rent	10310	Own house services
		6411-02	Real estate rent	10500	Other brokerage
				10320	Renting & leasing house services
101	Data processing & information services	8512-01	Information service	10700	Data processing & information services
102	Other business services	8511-01	Advertising	10810	Advertising services
		8519-02	Legal, financial and accounting services	10890	Misc. services for business
		8519-03	Civil engineering and construction services		
		8519-09	Other business services		
103	Machinery equipment rental & leasing	8513-01	Renting and leasing of electronic computing equipment	10900	Machinery & equipment renting & leasing
		8513-02	Renting and leasing of office machines (exc. electronic computing equipment)		
104	Public administration services	8111-01	Public administration (central)	11000	Public administration services
		8112-01	Public administration (local)		
		4131-03	Agricultural public utility construction		
105	Environmental sanitary services	5211-03	Sewage disposal (public)	11000	Environmental sanitary services
		5212-02	Other sanitary services (industrial)		
		5212-01	Other sanitary services (public)		
106	Educational training services	8211-01	School education (public)	11200	Educational training services
		8211-02	School education (private)		
		8213-01	Social education (public)		
		8213-02	Social education (private, non-profit)		
		8213-03	Other education (public)		
		8213-04	Other education (industrial)		

BUJO (117 SECTORS)		Japan I-O (408 SECTORS)		Taiwan I-O (487 SECTORS)	
CODE NO.	DESCRIPTION	CODE NO.	DESCRIPTION	CODE NO.	DESCRIPTION
107	Mass medical services	7321-01 7321-02 7321-03 8512-02 8611-01	Public broadcasting Private broadcasting Cable broadcasting News syndicated and detective agencies Motion picture production and distribution	11300	Mass media services
108	Scientific research & service	8211-03 8211-04 8211-05 8211-06 8221-01 8221-02 8221-03 8221-04	School research institute (public, natural sciences) School research institute (public, social sciences and humanities) School research institute (private, natural sciences) School research institute (private, social sciences and humanities) Research institute (public, natural sciences) Research institute (public, social sciences and humanities) Research institute (industrial, natural sciences) Research institute (industrial, social sciences and humanities)	11400	Scientific research & services
109	Medical & health services	8311-01 8311-02 8311-03 8311-04 8311-05 8311-06	Medical service (public) Medical service (private, non-profit) Medical service (industrial) Health and hygiene (public) Health and hygiene (private, non-profit) Health and hygiene (industrial)	11500	Medical & health services
110	Social welfare services	8312-03 8312-04	Social welfare service (public) Social welfare service (private, non-profit)	11600	Social welfare services
111	Services of civil association	8411-01 9122-00	Private non-profit organizations serving enterprises Consumption expenditures of private non-profit institutes	11700	Services of civil association
112	Other social services	8411-02	Private non-profit organizations serving households, n.e.c.	11800	Other social services
113	Recreation culture services	8611-02 8612-03 8611-03 8611-04 8611-05 8611-06 8611-07	Movie theaters Amusement eating and drinking places Theater and entertainment facilities Amusement halls Other amusement and recreation facilities Theatrical companies Other amusement and recreation services	11910 11990	Motion picture & related recreational services Misc. recreational & cultural services
114	Repair services	8619-07	miscellaneous repairs, n.e.c.	12090	Misc. repair services
115	Household services	8619-09	Other personal services	12100	Household services
116	Other personal services	8519-01 8619-01 8619-02 8619-03 8619-04 8619-05 8619-06	Building maintenance service Cleaning, laundries and dyeing services Barber shops Beauty shops Public baths Photo studios Funeral services	12200	Other personal services
117	Undistributed	9000-00 3919-04	Activities not elsewhere classified Ordnance	12310 12320 10600	Undistributed Scrap & second-hand goods Consulting services

4. Abbreviations

BIO table	Bilateral Input-Output table
BUIO sector classification	Bilateral Uniform Input-Output sector classification
CCC	standard Classification of Commodities of the Republic of China
CCCN	Custom Co-operation Council Nomenclature
CIC	Chinese standard Industrial Classification (CSIC)
CIF	Cost, Insurance and Freight
FOB	Free on Board
IDE	Institute of Developing Economies, Japan
ISIC	International Standard Industrial Classification
JIO sector classification	Japanese Input-Output sector classification
ROW	the Rest of the World
TIER	Taiwan Institute of Economic Research

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