

APPENDIX

1. Coding system for Indonesia-Japan bilateral input-output table (128 Sectors)

| <u>row</u> | <u>sector</u> | <u>column</u> | <u>sector</u> | <u>description</u> |
|------------|---------------|---------------|---------------|--|
| AI | 001 | AI | 001 | |
| : | | : | | Indonesia, intermediate sector |
| AI | 128 | AI | 128 | |
| AI | 900 | AI | 900 | sub total (AI 001-AI 128) |
| AJ | 001 | AJ | 001 | |
| : | | : | | Japan, intermediate sector |
| AJ | 128 | AJ | 128 | |
| AJ | 900 | AJ | 900 | sub total (AJ 001-AJ 128) |
| BF | 001 | | | freight+insurance |
| CW | 001 | | | |
| : | | | | intermediate input from the rest of the world* |
| CW | 128 | | | |
| CW | 900 | | | sub total (CW 001-CW 128) |
| DT | 001 | | | import duties and import commodity taxes |
| ET | 900 | ET | 900 | total intermediate input or output |
| VV | 001 | | | (compensation to employees) |
| VV | 002 | | | (operating surplus) |
| VV | 003 | | | value added (depreciation) |
| VV | 004 | | | (indirect tax) |
| VV | 005 | | | (subsidy) |
| VV | 900 | | | sub total (VV 001-VV 005) |
| XX | 600 | | | total input (ET 900+VV 900) |
| | | FI | 001 | (private consumption) |
| | | FI | 002 | Indonesia, final demand (government consumption) |
| | | FI | 003 | (fixed capital formation) |
| | | FI | 004 | (change in stocks) |
| | | FI | 900 | sub total (FI 001-FI 004) |
| | | FJ | 001 | (private consumption) |
| | | FJ | 002 | Japan, final demand (government consumption) |
| | | FJ | 003 | (fixed capital formation) |
| | | FJ | 004 | (change in inventories) |
| | | FJ | 900 | sub total (FJ 001-FJ 004) |
| | | FX | 900 | final demand total (FI 900+FJ 900) |
| | | GI | 900 | Indonesia total demand (AI 900+FI 900) |
| | | GJ | 900 | Japan total demand (AJ 900+FJ 900) |
| | | LC | 001 | export to China |
| | | LH | 001 | export to Hong Kong |
| | | LK | 001 | export to Korea |
| | | LM | 001 | export to Malaysia |
| | | LN | 001 | export to Taiwan |
| | | 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 (LC 001-LW 001) |
| | | QX | 001 | statistical discrepancy |
| | | XX | 600 | total output (GI 900+GJ 900+LX 900+QX 001) |

* CW excludes only Indonesia and Japan.

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

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

| BUIO 128 sectors | | Aggregation of 70 Sectors | | Aggregation of 7 Sectors | |
|------------------|--|---------------------------|---|--------------------------|---|
| C o d e | Description | C o d e | Description | C o d e | Description |
| 001 | Paddy | 01 | paddy | 01 | Agriculture, livestock, Forestry, and Fishery |
| 002 | Other cereals | 02 | Other cereals | | |
| 003 | Cassava | 03 | Root crops | | |
| 004 | Potato and other root crops | 04 | Vegetables and fruits | | |
| 005 | Vegetables | | | | |
| 006 | Fruits | | | | |
| 007 | Beans | 05 | Beans | | |
| 008 | Rubber | 06 | Rubber | | |
| 009 | Sugarcane | 07 | Sugarcane | | |
| 010 | Coconut | 08 | Coconut | | |
| 011 | Crude palm oil | 09 | Crude palm oil | | |
| 012 | Tobacco leaves | 10 | Tobacco leaves | | |
| 013 | Coffee beans and tea leaves | 11 | Coffee beans and tea leaves | | |
| 014 | Inedible fibre crops | 12 | Inedible fibre crops | | |
| 015 | Other estate crops | 13 | Other estate crops | | |
| 016 | Other crops | 14 | Other crops | | |
| 017 | Livestock | 15 | Livestock and its products | | |
| 018 | Dairy farming | | | | |
| 020 | Other animal raising | | | | |
| 019 | Poultry and poultry products | 16 | Poultry and poultry products | | |
| 021 | Wood and other forest products | 17 | Wood and other forest products | | |
| 022 | Seafish and other sea products | 18 | Fishery products | | |
| 023 | Inland water fish | | | | |
| 024 | Crude petroleum and natural gas | 19 | Crude petroleum and natural gas | 02 | Mining and Quarrying |
| 025 | Non-ferrous metal ores | 20 | Non-ferrous metal ores | | |
| 026 | Coal | 21 | Coal | | |
| 027 | Quarrying products | 22 | Quarrying products | | |
| 028 | Slaughtering | 23 | Processed and preserved fish, meat, vegetable and fruit, and dairy products | 03 | Manufacturing |
| 029 | Processed and preserved meat | | | | |
| 030 | Dairy products | | | | |
| 031 | Dried and salted fish | | | | |
| 032 | Processed and preserved marine products | | | | |
| 033 | Processed and preserved vegetable and fruits | | | | |
| 034 | Animal, fish and vegetable oil | 024 | Animal fish and vegetable oil | | |
| 035 | Milled and polished rice | 025 | Milled and polished rice | | |
| 036 | Wheat flour and other milled cereals | 026 | Wheat flour and other milled cereals | | |
| 038 | Sugar manufacturing | 027 | Sugar manufacturing | | |
| 040 | Ground coffee and processed tea | 028 | Ground coffee and processed tea | | |
| 037 | Bread, noodle and confectionery | 029 | Other processed foods | | |

| BUJO 128 sectors | | Aggregation of 70 Sectors | | Aggregation of 7 Sectors | |
|------------------|---|---------------------------|---|--------------------------|-------------|
| C o d e | Description | C o d e | Description | C o d e | Description |
| 041 | Other processed foods | 029 | | 03 | |
| 042 | Manufactured animal feed | (conti) | | (conti) | |
| 039 | Syrup | 030 | Syrup and beverages | | |
| 043 | Alcoholic beverage | | | | |
| 044 | Non-alcoholic beverage | | | | |
| 045 | Cigarette and other manufactured tobacco | 031 | Cigarette and other manufactured tobacco | | |
| 046 | Yarn and textiles | 032 | Yarn and textiles | | |
| 047 | Knitted products | 033 | Knitted products | | |
| 048 | Wearing apparel | 034 | Wearing apparel | | |
| 049 | Made-up textile goods, except wearing apparel | 035 | Other textile products | | |
| 050 | Carpet, rope and the like | | | | |
| 051 | Tanned and finished leather | 036 | Leather and leather products | | |
| 052 | Leather footwear and other products | | | | |
| 053 | Lumber | 037 | Lumber | | |
| 054 | Plywood and other wooden products | 038 | Plywood and other wooden products | | |
| 055 | Wooden furniture and fixture | | | | |
| 056 | Pulp, paper and paperboard | 039 | Paper, paperboard and paper products | | |
| 057 | Container, made of paper and paperboard | | | | |
| 058 | Printed and published materials | 040 | Printed and published materials | | |
| 059 | Basic chemical, other than fertilizer | 041 | Basic chemical, other than fertilizer | | |
| 060 | Fertilizer and pesticide | 042 | Fertilizer and pesticide | | |
| 061 | Synthetic rubber, resin and fibre | 043 | Chemical products | | |
| 062 | Medicaments | | | | |
| 063 | Soap, cosmetics, and the like | | | | |
| 064 | Paint, varnish and lacquer | | | | |
| 065 | Other chemical products | | | | |
| 066 | Petroleum refinery products | 044 | Petroleum and coal products | | |
| 067 | Coal product and paving materials | | | | |
| 068 | Tyre and tube | 045 | Tyre and other rubber products | | |
| 069 | Other rubber products | | | | |
| 070 | Plastic products | 046 | Plastic products | | |
| 071 | Glass and glass products | 047 | Glass and glass products | | |
| 072 | Cement | 048 | Cement | | |
| 073 | Cement, clay, ceramic and other non-metallic mineral products | 049 | Cement, clay, ceramic and other non-metallic mineral products | | |
| 074 | Basic iron and steel, and their products | 050 | Basic iron and steel, and its product | | |
| 075 | Non-ferrous basic metal | 051 | Non-ferrous basic metal | | |
| 076 | Non-electrical kitchenware | 052 | Fabricated metal products | | |

| BUIO 128 sectors | | Aggregation of 70 Sectors | | Aggregation of 7 Sectors | |
|------------------|---|---------------------------|---------------------------------------|--------------------------|---------------------|
| C o d e | Description | C o d e | Description | C o d e | Description |
| 077 | Cutlery, handtool and mechanic tool | 052 (conti) | | 03 (conti) | |
| 078 | Metalic furniture and fixture | | | | |
| 079 | Structural metal products | | | | |
| 080 | Other fabricated metal products | | | | |
| 081 | Machine and apparatus, all kinds | 053 | Machine and apparatus, all kinds | | |
| 082 | Generator and its apparatus | 054 | Generator and its apparatus | | |
| 083 | Radio, TV, Audio and communication equipment and apparatus | 055 | Electrical equipment and apparatus | | |
| 084 | Household electrical appliances | | | | |
| 085 | Other electrical apparatus | | | | |
| 086 | Battery | | | | |
| 087 | Motor vehicle and motor cycle | 056 | Motrorized and non-motorized vehicles | | |
| 088 | Non-motorized vehicles | | | | |
| 089 | Ship and its repair | 057 | Other transport equipment | | |
| 090 | Train and its repair | | | | |
| 091 | Aircraft and its repair | | | | |
| 092 | Professional, scientific and measuring instruments | 058 | Other manufactured products | | |
| 093 | Photographic and optical goods | | | | |
| 094 | Watch and clock | | | | |
| 095 | Musical instruments | | | | |
| 096 | Sporting goods | | | | |
| 097 | Other manufacturing goods | | | | |
| 098 | Electricity and gas supply | 059 | Electricity, gas and water supply | | |
| 099 | Water supply | | | | |
| 100 | Residential and non-residential building | 060 | Construction | 005 | Construction |
| 101 | Public work in agriculture | | | | |
| 102 | Public work on road, railroad and port | | | | |
| 103 | Construction and installation of electricity, water and communication | | | | |
| 104 | Other construction | | | | |
| 105 | Wholesale and retail trade | 061 | Wholesale and retail trade | 006 | Trade and transport |
| 106 | Railway transport | 062 | Transport | | |
| 107 | Road transport | | | | |
| 108 | Sea transport | | | | |
| 109 | Inland water transport | | | | |
| 110 | Air transport | | | | |
| 111 | Services related to transport | | | | |
| 112 | Storage facility services | | | | |

| BUJO 128 sectors | | Aggregation of 70 Sectors | | Aggregation of 7 Sectors | |
|------------------|--|---------------------------|---------------------------------------|--------------------------|-------------|
| C o d e | Description | C o d e | Description | C o d e | Description |
| 113 | Postal and telecommunication services | 063 | Postal and telecommunication services | 007 | Services |
| 114 | Financial services | 064 | Financial services | | |
| 115 | Insurance | | | | |
| 116 | Real estate and house rent | 065 | Real estate and business services | | |
| 117 | Business services | | | | |
| 118 | Public administration | 066 | Public administration | | |
| 119 | Educational services | 067 | Social and community services | | |
| 120 | Health services | | | | |
| 121 | Other social and community services | | | | |
| 122 | Restaurant | 068 | Amusement and recreational services | | |
| 123 | Hotel | | | | |
| 124 | Motion picture production and distribution | | | | |
| 125 | Amusement and recreational services | | | | |
| 126 | Repair services, n. e. c. | 069 | Other services | | |
| 127 | Personal household services | | | | |
| 128 | Unspecified sector | 070 | Unspecified sector | | |

3. Bridge of the "BUIO—Indonesian i-o sector classification (IIO) —Japanese i-o sector classification (JIO)"

| BUIO (128 SECTORS) | | INDONESIA I-O (170 SECTORS) | | JAPAN I-O (408 SECTORS) | |
|--------------------|--------------------------------|-----------------------------|--|-------------------------|--|
| 001 | Paddy | 1-001 | Paddy | 0111-01 | Rice |
| 002 | Other cereals | 1-002 | Maize | 0111-03 | Miscellaneous cereals |
| | | 1-003 | Other cereals | 0111-02 | Barley and Wheat |
| 003 | Cassava | 1-005 | Cassava | | |
| 004 | Potato and other root crops | 1-006 | Other root crops | 0112-01 | Potatoes |
| 005 | Vegetables | 1-011 | Vegetables | 0113-01 | Vegetables |
| 006 | Fruits | 1-012 | Fruits | 0114-01 | Fruits |
| 007 | Beans | 1-008 | Peanut | 0112-02 | Pulses |
| | | 1-009 | Soybean | | |
| | | 1-010 | Other beans | | |
| 008 | Rubber | 1-013 | Rubber | 0116-09 | Other inedible field crops |
| | | 3-104 | Smoked & remilled rubber | | |
| 009 | Sugarcane | 1-014 | Sugarcane and by product | 0115-02 | Field crops for sugar |
| 010 | Coconut | 1-016 | Coconut | | |
| 011 | Crude palm oil | 1-018 | Palm oil | | |
| 012 | Tobacco leaves | 1-020 | Tobacco | 0116-02 | Leaf tobacco |
| 013 | Coffee beans and tea leaves | 1-021 | Coffee | 0115-03 | Crops for beverages |
| | | 1-022 | Tea | | |
| 014 | Inedible fiber crops | 1-019 | Fibre crops | | |
| 015 | Other estate crops | 1-023 | Clove | 0115-09 | Other edible field crops |
| | | 1-024 | Pepper | | |
| | | 1-025 | Nutmeg | | |
| | | 1-026 | Other estate crops | | |
| 016 | Other crops | 1-027 | Other crops | 0115-01 | Field crops for edible oil |
| | | | | 0116-01 | Field crops for feed |
| | | | | 0116-03 | Seeds |
| | | | | 0116-04 | Flowers |
| | | | | 0131-01 | Veterinary service |
| | | | | 0131-02 | Agricultural services (except veterinary) |
| 017 | Livestock | 1-028 | Livestock and its products except fresh milk | 0121-04 | Pig raising |
| | | | | 0121-05 | Beef cattle raising |
| 018 | Dairy farming | 1-030 | Milk livestock raising | 0121-01 | Dairy farming |
| 019 | Poultry and poultry products | 1-031 | Poultry and poultry products | 0121-02 | Egg hen |
| | | | | 0121-03 | Fowls, n. e. c. |
| 020 | Other animal raising | 1-032 | Other animal raising | 0121-09 | Other livestock raising |
| | | | | 0122-01 | Sericulture |
| 021 | Wood and other forest products | 1-033 | Wood | 0211-01 | Forest planting and conservation |
| | | 1-034 | Other forest products | 0212-01 | Logging |
| | | 1-035 | Hunting Products | 0213-01 | Cultivated and uncultivated forest products (inc. hunting) |
| | | | | 1131-02 | Organic fertilizers, n. e. c. |
| 022 | Seafish and other sea products | 1-036 | Sea fish and other seaproducts | 0311-01 | Coastal water fishing |

| BUIO (128 SECTORS) | | INDONESIA I-O (170 SECTORS) | | JAPAN I-O (408 SECTORS) | |
|--------------------|--|---|---|---|--|
| 022 (conti) | | 1-036 (conti) | | 0311-02 0311-03 0311-04 1113-01 | Off-shore water fishing Ocean water fishing Sea-shore water culture Frozen fishes and shellfishes |
| 023 | Inland water fish | 1-037 | Inland water fish | 0312-01 0312-02 | Inland water fishing Inland water culture |
| 024 | Crude petroleum and natural gas | 2-040 3-102 | Crude oil, Gas and Geothermal LNG | 0721-01 0731-01 | Crude petroleum Natural gas |
| 025 | Non-ferrous metal ores | 2-045 2-042 2-041 2-043 2-044 2-046 2-047 | Copper ore Tin ore Iron sand Nickel ore Bauxite ore Gold and silver ore Other non-ferrous metal | 0612-01 0611-01 | Non-ferrous metal ores Iron and ore mining |
| 026 | Coal | 2-039 | Coal | 0711-01 | Coal mining |
| 027 | Quarrying products | 2-048 2-049 2-051 | Chemical and fertilizer mineral Crude salt Quarrying, all kinds | 0621-01 0621-09 0622-01 0622-02 0629-09 | Limestone Other materials for ceramics Gravel and quarry Crushed stones Other non-metal ores |
| 028 | Slaughtering | 1-029 | Slaughtering | 1111-01 | Slaughtering and meat processing |
| 029 | Processed and preserved meat | 3-052 | Processed and preserved meat | 1112-01 1112-02 | Canned or bottled meat products Processed meat products |
| 030 | Dairy products | 3-053 | Dairy products | 1112-04 | Drinking milk and dairy products |
| 031 | Dried and salted fish | 1-038 | Dried and salted fish | 1113-02 | Salted, dried, and smoked seafoods |
| 032 | Processed and preserved marine products | 3-055 | Processed and preserved fish and the like | 1113-03 1113-04 1113-09 | Canned or bottled seafoods Kneaded fish meat Other processed seafoods |
| 033 | Processed and preserved vegetable and fruits | 3-054 | Processed and preserved vegetable and fruit | 1115-03 1115-09 1119-03 1119-04 | Bottled or canned agricultural products Other vegetables and fruits products Retort foods Frozen cooked foods |
| 034 | Animal, fish and vegetable oil | 3-056 1-017 | Vegetable and animal oil Farm vegetable oil except palm oil | 1112-03 1113-05 1115-07 | Animal oil and fat Fish oil and scrap Vegetable oil and waste |
| 035 | Milled and polished rice | 1-004 3-057 | Handpounded rice Milled and polished rice | 1114-01 | Grain polishing |

| BUIO (128 SECTORS) | | INDONESIA I-O (170 SECTORS) | | JAPAN I-O (408 SECTORS) | |
|--------------------|--|-----------------------------|--|-----------------------------------|---|
| 036 | Wheat flour and other milled cereals | 1-007 | Dried cassava & sago | 1114-02 | Flour manufacturing |
| | | 3-058 | Other milled cereals | 1115-05 | Starch |
| | | 3-059 | Wheat flour | | |
| | | 3-060 | Other flour | | |
| 037 | Bread, noodle and confectionery | 3-061 | Bread and bakery product | 1115-01 | Noodles |
| | | 3-062 | Noodle macaroni and similar product | 1115-02 | Bread and confectionry |
| | | 3-064 | Chocolate and sugar confectionery | | |
| 038 | Sugar manufacturing | 1-015 | Brown sugar | 1115-04 | Sugar |
| | | 3-063 | Sugar | | |
| 039 | Syrup | 3-065 | Syrup | 1115-06 | Glucose and isomerized sugar |
| 040 | Ground coffee and processed tea | 3-066 | Ground coffee | 1129-01 | Finished tea and coffee |
| | | 3-067 | Processed tea | | |
| 041 | Other processed foods | 3-068 | Processed soybean | 1119-01 | Salt |
| | | 3-069 | Other foods | 1119-02 | Flavoring |
| | | | | 1119-09 | Other foodstuffs |
| | | | | 1129-03 | Ice manufacturing |
| 042 | Manufactured animal feed | 3-070 | Animal feed | 1131-01 | Feeds for animal and poultry |
| 043 | Alcoholic beverage | 3-071 | Alcoholic beverage | 1121-01 | Refined sake |
| | | | | 1121-02 | Beer |
| | | | | 1121-03 | Ethyl alcohol for liquor manufacturing |
| | | | | 1121-04 | Whisky and brandy |
| | | | | 1121-09 | Other liquor |
| 044 | Non-alcoholic beverage | 3-072 | Nonalcoholic beverage | 1129-02 | Soft drinks |
| 045 | Cigarette and other manufactured tobacco | 3-073 | Cigarette | 1141-01 | Tobacco |
| | | 3-074 | Other processed tobacco | | |
| 046 | Yarn and textiles | 3-075 | Spinning | 1511-01 | Silk-reeling |
| | | | | 1511-02 | Cotton-yarn |
| | | | | 1511-03 | Synthetic fiber yarn |
| | | | | 1511-04 | Woolen yarn |
| | | | | 1511-09 | Other fiber yarns |
| | | 3-076 | Wearing | 1512-01 | Cotton and staple fibers fabrics (inc. fabrics of discontinuous synthetic fibers) |
| 3-081 | Other textiles | 1512-02 | Silk and artificial silk fabrics (inc. fabrics of continuous synthetic fibers) | | |
| | | 1512-03 | Woolen woven fabrics | | |
| | | 1512-09 | Other woven fabrics | | |
| | | 1514-01 | Yarn and fabric dyeing and finishing | | |
| | | | 1519-09 | Other fabricated textile products | |
| 047 | Knitted products | 3-078 | Knitting | 1513-01 | Knit fabrics |

| BUIO (128 SECTORS) | | INDONESIA I-O (170 SECTORS) | | JAPAN I-O (408 SECTORS) | |
|--------------------|---|-----------------------------|---|-------------------------|---|
| 048 | Wearing apparel | 3-079 | Wearing apparel | 1521-01 | Wearing apparel |
| | | | | 1522-01 | Apparel accessories |
| 049 | Made-up textile goods, except wearing apparel | 3-077 | Make-up textile goods, except wearing apparel | 1519-04 | Textile for medical use |
| | | | | 1529-01 | Cotton and beddings |
| | | | | 1529-09 | Other ready-made textile products |
| 050 | Carpet, rope and the like | 3-080 | Carpet, rope and the like | 1519-01 | Straw and rush products |
| | | | | 1519-02 | Ropes and nets |
| | | | | 1519-03 | Carpets and floor mats |
| 051 | Tanned and finished leather | 3-082 | Tanned and finished Leather | 2412-01 | Leather and fur products (exc. wearing apparel) |
| 052 | Leather footwear and other products | 3-083 | Footwear and leather product | 2411-01 | Leather footwears |
| | | | | 2412-02 | Luggage, bags and miscellaneous leather products |
| 053 | Lumber | 3-084 | Sawn and processed wood | 1611-01 | Sawn lumber |
| 054 | Plywood and other wooden products | 3-085 | Plywood and the like | 1611-02 | Plywood |
| | | 3-086 | Wooden construction material | 1611-03 | Wooden chips |
| | | 3-088 | Other wood and cork product | 1619-09 | Other wooden products |
| | | 3-089 | Wooden goods other than plastic | | |
| 055 | Wooden furniture and fixture | 3-087 | Furniture and fixture made of wood, Bamboo and Rattan | 1711-01 | Wooden furniture and accessories |
| | | | | 1711-02 | Wooden fixtures |
| 056 | Pulp, paper and paperboard | 3-090 | Paper and cardboard | 1811-01 | Pulp |
| | | | | 1812-01 | Machine-made paper and Japanese paper |
| | | | | 1813-01 | Paper board |
| | | | | 1813-02 | Corrugated card board |
| | | | | 1813-03 | Coated paper and paper converted for construction use |
| | | | | 1829-09 | Other pulp, paper, and converted paper products |
| 057 | Container, made of paper and paperboard | 3-091 | Paper and cardboard product | 1821-01 | Corrugated cardboard boxes |
| | | | | 1821-09 | Other paper containers |
| 058 | Printed and published materials | 3-092 | Printed and published material | 1911-01 | Newspapers |
| | | | | 1911-02 | Printing, engraving and book-binding |
| | | | | 1911-03 | Publishing |
| 059 | Basic chemical other than fertilizer | 3-093 | Basic chemical other than fertilizer | 2011-01 | Ammonia |
| | | | | 2021-01 | Industrial soda chemicals |
| | | | | 2029-01 | Sulfuric acid |
| | | | | 2029-02 | Inorganic pigment |
| | | | | 2029-03 | Compressed gas and liquefied gas |
| | | | | 2029-09 | Other inorganic basic chemicals |

| BUJO (128 SECTORS) | | INDONESIA I-O (170 SECTORS) | | JAPAN I-O (408 SECTORS) | |
|--------------------|-----------------------------------|-----------------------------|---|-------------------------|--|
| 059 (conti) | | 3-093 (conti) | | 2031-01 | Petrochemical basic products |
| | | | | 2031-02 | Petrochemical aromatic products |
| | | | | 2032-01 | Aliphatic intermediates |
| | | | | 2032-02 | Cyclic intermediates |
| | | | | 2039-01 | Coal tar products |
| | | | | 2039-02 | Methane derivatives |
| | | | | 2039-03 | Oil and fat industrial chemicals |
| | | | | 2039-04 | Plasticizers |
| | | | | 2039-09 | Other organic basic chemicals |
| 060 | Fertilizer and pesticide | 3-094 | Fertilizer and pesticide | 2011-02 | Elemental fertilizers |
| | | | | 2011-03 | Combined and compound fertilizers |
| | | | | 2079-01 | Agricultural chemicals |
| 061 | Synthetic rubber, resin and fibre | 3-095 | Synthetic rubber, resin and fiber, and plastic material | 2033-01 | Synthetic rubber |
| | | | | 2041-01 | Thermo-setting resin |
| | | | | 2041-02 | Thermoplastic resin |
| | | | | 2041-03 | High functionality resin |
| | | | | 2041-09 | Other resin |
| | | | | 2051-01 | Artificial silk and staple fibers |
| | | | | 2051-02 | Synthetic fiber |
| 062 | Medicaments | 3-097 | Medicine | 2061-01 | Medicaments |
| | | 3-100 | Traditional medicine | | |
| 063 | Soap, cosmetics, and the like | 3-098 | cleaning material and cosmetic | 2071-01 | Soap, synthetic detergents and surface active agents |
| | | | | 2071-02 | Cosmetics, toilet preparations and dentifrices |
| 064 | Paint, vernish and lacquer | 3-096 | Paint, varnish and lacquer | 2072-01 | Paints, varnish and lacquer |
| 065 | Other chemical products | 3-099 | Other chemical product | 2039-05 | Synthetic dye |
| | | | | 2072-02 | Printing ink |
| | | | | 2073-01 | Photographic sensitive materials |
| | | | | 2079-02 | Gunpowder |
| | | | | 2079-09 | Other final chemical products |
| 066 | Petroleum refinery products | 3-101 | Oil refinery | 2111-01 | Petroleum refinery products |
| 067 | Coal product and paving materials | 2-050 | Natural asphalt | 2121-01 | Coal products |
| | | 3-103 | Coal product | 2121-02 | Paving materials |
| 068 | Tyre and tube | 3-105 | Tyre and tube | 2311-01 | Tires and inner tubes |
| 069 | Other rubber products | 3-106 | Other rubber product | 2319-01 | Rubber footwears |
| | | | | 2319-09 | Other rubber products |
| 070 | Plastic products | 3-107 | Plastic ware | 1829-01 | Cellophane |
| | | | | 2211-01 | Plastic products |
| | | | | 2319-02 | Plastic footwear |
| 071 | Grass and glass products | 3-109 | Glass and Glassware | 2511-01 | Sheet glass and safety galss |

| BUIO (128 SECTORS) | | INDONESIA I-O (170 SECTORS) | | JAPAN I-O (408 SECTORS) | | | |
|--------------------|---|-----------------------------|-------------------------------------|---|---|---------|--------------------------------|
| 071 (conti) | | 3-109 (conti) | | 2512-01 | Glass fiber and glass fiber products | | |
| | | | | 2519-09 | Other glasses and glass products | | |
| 072 | Cement | 3-111 | Cement and lime | 2521-01 | Cement | | |
| 073 | Cement, clay, ceramic and other non-metallic mineral products | 3-108 | Ceramic and earthen ware | 2522-01 | Ready-mixed concrete | | |
| | | | | 3-110 | Structural clay and ceramic product | 2523-01 | Cement products |
| | | | | 3-112 | Other nonmetallic mineral product | 2531-01 | Ceramic wares |
| | | | | | | 2599-01 | Clay refractories |
| | | | | | | 2599-02 | Other structural clay products |
| | | | | | | 2599-03 | Carbon and graphite products |
| | | | | | | 2599-04 | Abrasives |
| | | | 2599-09 | Miscellaneous ceramics, stone and clay products | | | |
| 074 | Basic iron and steel, and their products | 3-113 | Basic iron, steel and steel product | 2611-01 | Pig iron | | |
| | | | | 2611-02 | Ferro alloy | | |
| | | | | 2611-03 | Crude steel | | |
| | | | | 2612-11 | Iron scrap | | |
| | | | | 2621-01 | Hot rolled steel | | |
| | | | | 2622-01 | Steel pipes and tubes | | |
| | | | | 2623-01 | Cold-finished steel | | |
| | | | | 2623-02 | Coated steel | | |
| | | | | 2631-01 | Cast and forged steel | | |
| | | | | 2631-02 | Cast iron pipes and tubes | | |
| | | | | 2631-03 | Cast and forged materials (iron) | | |
| 2631-04 | Iron and steel shearing and slitting | | | | | | |
| 2631-09 | Other steel products | | | | | | |
| 075 | Non-ferrous basic metal | 3-114 | Nonferrous basic metal | 2711-01 | Copper | | |
| | | | | 2711-02 | Lead (inc. regenerated lead) | | |
| | | | | 2711-03 | Zinc (inc. regenerated zinc) | | |
| | | | | 2711-04 | Aluminum | | |
| | | | | 2711-09 | Other non-ferrous metals | | |
| | | | | 2712-011 | Non-ferrous metal scrap | | |
| | | | | 2722-01 | Rolled and drawn copper and alloys | | |
| | | | | 2722-02 | Rolled aluminum products | | |
| | | | | 2722-03 | Non-ferrous metal castings and forgings | | |
| | | | | 2722-04 | Nuclear fuels | | |
| 2722-09 | Other non-ferrous metal products | | | | | | |
| 076 | Non-electrical kitchenware | 3-115 | Kitchenware | 2891-01 | Gas and oil appliances, heating and cooking apparatus | | |

| BUIO (128 SECTORS) | | INDONESIA I-O (170 SECTORS) | | JAPAN I-O (408 SECTORS) | |
|--------------------|--------------------------------------|-----------------------------|---|-------------------------|--|
| 077 | Cutlery, hand tool and mechanic tool | 3-116 | Cutlery and agricultural tool | 2899-03 | Plumber's supplies, powder metallurgy products and tools |
| | | | | 3019-03 | Machinists' precision tools |
| 078 | Metalic furniture and fixture | 3-117 | Metalic furniture and fixture | 1711-03 | Metalic furniture and accessories |
| 079 | Structural metal products | 3-118 | Structural metal product | 2811-01 | Metal products for construction |
| | | | | 2812-01 | Metal products for architecture |
| 080 | Other fabricated metal products | 3-119 | Other metal products | 2899-01 | Bolts, nuts, rivets, and springs |
| | | | | 2899-02 | Metal containers, fabricated plate and sheet metal |
| | | | | 2899-09 | Other metal products |
| 081 | Machine and apparatus, all kinds | 3-120 | Machine and apparatus except electrical machinery | 3011-01 | Boilers and turbines |
| | | | | 3011-02 | Engines |
| | | | | 3012-01 | Conveyors |
| | | | | 3013-01 | Refrigerators and air conditioning apparatus |
| | | | | 3019-01 | Pumps and compressors |
| | | | | 3019-02 | Sewing machines and knitting machinery |
| | | | | 3019-09 | Other general industrial machinery and equipment |
| | | | | 3021-01 | Mining, civil engineering and construction machinery |
| | | | | 3022-01 | Chemical machinery |
| | | | | 3023-01 | Industrial robots |
| | | | | 3024-01 | Metal machine tools |
| | | | | 3024-02 | Metal processing machinery |
| | | | | 3029-01 | Agricultural machinery |
| | | | | 3029-02 | Textile machinery |
| | | | | 3029-03 | Food processing machinery |
| | | | | 3029-09 | Other special industrial machinery |
| | | | | 3031-01 | Metal mold |
| | | | | 3031-02 | Bearings |
| | | | | 3031-09 | Other general machines and parts |
| | | | | 3032-10 | Repairs of general machinery |
| | | | | 3111-01 | Office machines |
| | | | | 3112-01 | Machinery for service industry |
| | | | | 3311-01 | Electronic computing equipment |
| | | | | 3311-02 | Electronic computing equipment accessories |
| | | | | 3421-05 | Wiring devices and supplies |
| | | | | 3421-06 | Electrical equipment for internal combustion engines |
| | | | | 3919-04 | Ordnance |

| BUIO (128 SECTORS) | | INDONESIA I-O (170 SECTORS) | | JAPAN I-O (408 SECTORS) | |
|--------------------|--|-----------------------------|---------------------------------------|-------------------------|--|
| 082 | Generator and its apparatus | 3-121 | Electrical machinery and apparatus | 3411-01 | Rotating electrical machinery |
| | | | | 3411-02 | Relay switches and switchboards |
| | | | | 3411-03 | Other electricity transmission and distribution apparatus |
| | | | | 3411-09 | Other industrial heavy electrical equipment |
| 083 | Radio, TV, Audio and communication equipment and apparatus | 3-122 | Communication equipment and apparatus | 3211-01 | Electric audio equipment |
| | | | | 3211-02 | Radio and television sets |
| | | | | 3211-03 | Magnetic recording and playback equipment (VCR) |
| | | | | 3321-01 | Wired communication equipment |
| | | | | 3321-02 | Radio communication equipment |
| | | | | 3321-09 | Other communication equipment |
| | | | | 3341-01 | Semiconductor devices and integrated circuits |
| | | | | 3421-02 | Electric lighting fixtures |
| | | | | 3431-01 | Electron tubes |
| | | | | 3431-02 | Parts and accessories of electric audio equipment |
| | | | | 3431-09 | Parts and accessories of electric and communication equipment |
| | | | | 3432-10 | Repair of electric machinery |
| 084 | Household electrical appliances | 3-123 | Household electrical appliances | 3211-09 | Other household electric appliances |
| 085 | Other electrical apparatus | 3-124 | Other electrical apparatus | 2721-01 | Electric wires & cables |
| | | | | 3421-04 | Electrical bulbs |
| | | | | 3421-09 | Other weak electrical equipment |
| 086 | Battery | 3-125 | Accumulator and dry battery | 3421-03 | Batteries |
| 087 | Motor vehicle and motor cycle | 3-128 | Motor vehicle except motor cycle | 3511-01 | Passenger cars |
| | | 3-129 | Motorcycle | 3521-01 | Trucks, buses, and other motor vehicles |
| | | | | 3541-01 | Motor vehicle bodies |
| | | | | 3541-02 | Internal combustion engines for motor vehicles and their parts |
| | | | | 3541-03 | Motor vehicle parts and accessories |
| | | | | 3531-01 | Two wheel motor vehicles |
| 088 | Nonmotorized vehicles | 3-130 | Nonmotorized vehicles | 3629-01 | Bicycles |
| 089 | Ship and its repair | 3-126 | Ship and its repair & maintenance | 3611-01 | Steel ships |
| | | | | 3611-02 | Other ships |
| | | | | 3611-03 | Internal combustion engine for vessel |
| | | | | 3611-10 | Repair of ships |

| BUIO (128 SECTORS) | | INDONESIA I-O (170 SECTORS) | | JAPAN I-O (408 SECTORS) | |
|--------------------|--|-----------------------------|--|-------------------------|--|
| 090 | Train and its repair | 3-127 | Train and its repair & maintenance | 3621-01 | Railroad cars |
| | | | | 3621-10 | Repair of railroad cars |
| 091 | Aircraft and its repair | 3-131 | Aircraft and its repair & maintenance | 3622-01 | Aircrafts |
| | | | | 3622-10 | Repair of aircrafts |
| 092 | Professional, scientific and measuring instruments | 3-132 | Professional, scientific and measuring equipment | 3331-01 | Applied electronic equipment |
| | | | | 3421-01 | Electric measuring instruments |
| | | | | 3719-01 | Physical and chemical instruments |
| | | | | 3719-02 | Analytical instruments, testing machines and measuring instruments |
| | | | | 3719-03 | Medical instruments |
| | | | | 3719-10 | Repair of precision instruments |
| 093 | Photographic and optical goods | 3-133 | Photographic and optical good | 3711-01 | Cameras |
| | | | | 3711-09 | Other photographic and optical instruments |
| 094 | Watch and clock | 3-134 | Watch and clock | 3712-01 | Watches and clocks |
| 095 | Musical instruments | 3-136 | Musical instrument | 3919-01 | Musical instruments and record disks |
| 096 | Sporting goods | 3-137 | Sporting goods | 3911-02 | Sporting and athletic goods |
| 097 | Other manufacturing goods | 3-135 | Jewelry article | 3911-01 | Toys |
| | | 3-138 | Other industrial goods, N.E.C. | 3919-02 | Writing instruments and stationery |
| | | | | 3919-03 | Small personal adornments |
| | | | | 3919-09 | Miscellaneous manufacturing products |
| | | | | 3629-09 | Other transport machinery |
| | | | | 3629-10 | Repair of other transport machinery |
| 098 | Electricity and gas supply | 4-139 | Electricity and gas | 5111-01 | Electric power (atomic power) |
| | | | | 5111-02 | Electric power (thermal power) |
| | | | | 5111-03 | Electric power (water power, etc.) |
| | | | | 5111-04 | Self power generation |
| | | | | 5121-01 | Gas supply |
| | | | | 5122-01 | Steam and hot water supply |
| 099 | Water supply | 4-140 | Water supply | 5211-01 | Water supply |
| | | | | 5211-02 | Industrial water supply |
| 100 | Residential and non-residential building | 5-141 | Residential and non-residential building | 4111-01 | New residential construction (wooden) |
| | | | | 4111-02 | New residential construction (non-wooden) |
| | | | | 4112-01 | New non-residential construction (wooden) |

| BUJO (128 SECTORS) | | INDONESIA I-O (170 SECTORS) | | JAPAN I-O (408 SECTORS) | |
|--------------------|---|-----------------------------|--|-------------------------|---|
| 100 (conti) | | 5-141 (conti) | | 4112-02 | New non-residential construction (non-wooden) |
| | | | | 4121-01 | Repair of buildings |
| 101 | Public work in agriculture | 5-142 | Public work in agriculture | 4131-03 | Agricultural public utility construction |
| 102 | Public work on road, railroad and port | 5-143 | Public work on road, railroad and port | 4131-01 | Public utility construction and maintenance of roads |
| | | | | 4131-02 | Public utility construction and maintenance of rivers, drainers and others |
| | | | | 4132-01 | Railway construction |
| 103 | Construction and installation of electricity, water and communication | 5-144 | Construction and installation of electricity, gas, water and communication | 4132-02 | Electric utility facilities construction |
| | | | | 4132-03 | Telecommunications facilities construction |
| 104 | Other construction | 5-145 | Other constructions | 4132-09 | Other civil engineering and construction |
| 105 | Wholesale and retail trade | 6-146 | Trade | 6111-01 | Wholesale trade |
| | | | | 6112-01 | Retail trade |
| 106 | Railway transport | 7-149 | Railway transport | 7111-01 | National railway transport (except passengers of exceptional reduced fare line) |
| | | | | 7112-01 | National railway transport (passengers of exceptional reduced fare line) |
| | | | | 7113-01 | Local railways and tramway transport |
| | | | | 7122-02 | Railway forwarding |
| 107 | Road transport | 7-150 | Road transport | 7121-01 | Bus transport |
| | | | | 7121-02 | Limousine and taxi transport |
| | | | | 7122-01 | Road freight transport |
| 108 | Sea transport | 7-151 | Sea transport | 7141-01 | Ocean transport |
| 109 | Inland water transport | 7-152 | Inland water transport | 7142-01 | Coastal and inland water transport |
| 110 | Air transport | 7-153 | Air transport | 7151-01 | Air transport |
| 111 | Services related to transport | 7-154 | Service allied to transport | 7143-01 | Transport services in harbor |
| | | | | 7171-01 | Packing |
| | | | | 7179-01 | Road transport facilities services |
| | | | | 7179-02 | Services related to water transport (public) |
| | | | | 7179-03 | Services related to water transport (industrial) |
| | | | | 7179-04 | Services related to air transport (public) |
| | | | | 7179-05 | Services related to air transport (industrial) |
| | | | | 7179-09 | Other transport services |
| 112 | Storage facility services | 7-155 | Storage and warehousing | 7161-01 | Storage facility services |
| 113 | Postal and telecommunication services | 7-156 | Communication | 7311-01 | Postal service |

| BUIO (128 SECTORS) | | INDONESIA I-O (170 SECTORS) | | JAPAN I-O (408 SECTORS) | |
|--------------------|----------------------------|-----------------------------|---|-------------------------|--|
| 113 (conti) | | 7-156 (conti) | | 7312-01 | Domestic telecommunication service |
| | | | | 7312-02 | International telecommunication service |
| | | | | 7319-09 | Other services related to communication |
| 114 | Financial services | 8-157 | Banking and other financial institution | 6211-01 | Financial service |
| 115 | Insurance | 8-158 | Insurance | 6212-01 | Life insurance |
| | | | | 6212-02 | Casualty insurance |
| 116 | Real estate and house rent | 8-159 | Real estate | 6411-01 | Real estate agencies and managers |
| | | | | 6411-02 | Real estate rent |
| | | | | 6421-01 | House rent |
| 117 | Business services | 8-160 | Business service | 8511-01 | Advertising |
| | | | | 8512-01 | Information service |
| | | | | 8512-02 | News syndicates and detective agencies |
| | | | | 8513-01 | Renting and leasing of electronic computing equipment |
| | | | | 8513-02 | Renting and leasing of office machines (exc. electronic computing equipment) |
| | | | | 8514-01 | Renting and leasing of motor vehicles |
| | | | | 8519-01 | Building maintenance service |
| | | | | 8519-02 | Legal, financial and accounting services |
| | | | | 8519-03 | Civil engineering and construction services |
| | | | | 8519-09 | Other business services |
| 118 | Public administration | 9-161 | Public administration and defence | 8111-01 | Public administration (central) |
| | | | | 8112-01 | Public administration (local) |
| 119 | Educational services | 9-162 | Educational service | 8211-01 | School education (public) |
| | | | | 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) |
| 120 | Health services | 9-163 | Health service | 8311-01 | Medical service (public) |
| | | | | 8311-02 | Medical service (private, non-profit) |
| | | | | 8311-03 | Medical service (industrial) |
| | | | | 8311-04 | Health and hygiene (public) |
| | | | | 8311-05 | Health and hygiene (private, non-profit) |
| | | | | 8311-06 | Health and hygiene (industrial) |

| BUJO (128 SECTORS) | | INDONESIA I-O (170 SECTORS) | | JAPAN I-O (408 SECTORS) | |
|--------------------|---|-----------------------------|--|-------------------------|---|
| 121 | Other social and community services | 9-164 | Other social and community service | 5211-03 | Sewage disposal (public) |
| | | | | 5212-01 | Other sanitary services (public) |
| | | | | 5212-02 | Other sanitary services (industrial) |
| | | | | 8211-03 | School research institute (public, natural sciences) |
| | | | | 8211-04 | School research institute (public, social sciences and humanities) |
| | | | | 8211-05 | School research institute (private, natural sciences) |
| | | | | 8211-06 | School research institute (private, social sciences and humanities) |
| | | | | 8221-01 | Research institute (public, natural sciences) |
| | | | | 8221-02 | Research institute (public, social sciences and humanities) |
| | | | | 8221-03 | Research institute (industrial, natural sciences) |
| | | | | 8221-04 | Research institute (industrial, social sciences and humanities) |
| | | | | 8312-01 | Social insurance (public) |
| | | | | 8312-02 | Social insurance (private, non-profit) |
| | | | | 8312-03 | Social welfare service (public) |
| | | | | 8312-04 | Social welfare service (private, non-profit) |
| | | | | 8411-01 | Private non-profit organizations serving enterprises |
| 8411-02 | Private non-profit organizations serving households, n.e.c. | | | | |
| 122 | Restaurant | 6-147 | Restaurant | 8612-01 | General eating and drinking places (except coffee shops) |
| | | | | 8612-02 | Coffee shops |
| | | | | 8612-03 | Amusement eating and drinking places |
| 123 | Hotel | 6-148 | Hotel | 8613-01 | Hotel and other lodging places |
| 124 | Motion picture production and distribution | 9-165 | Motion picture production and distribution | 8611-01 | Motion picture production and distribution |
| 125 | Amusement and recreational services | 9-166 | Amusement and recreational service | 7321-01 | Public broadcasting |
| | | | | 7321-02 | Private broadcasting |
| | | | | 7321-03 | Cable broadcasting |
| | | | | 8611-02 | Movie theaters |
| | | | | 8611-03 | Theater and entertainment facilities |
| | | | | 8611-04 | Amusement halls |
| | | | | 8611-05 | Other amusement and recreation facilities |
| 8611-06 | Theatrical companies | | | | |

| BUIO (128 SECTORS) | | INDONESIA I-O (170 SECTORS) | | JAPAN I-O (408 SECTORS) | |
|--------------------|-----------------------------|-----------------------------|----------------------------|-------------------------|---|
| 125 (conti) | | 9-166 (conti) | | 8611-07 | Other amusement and recreation services |
| 126 | Repair services, N. E. C. | 9-167 | Repair service, N. E. C. | 3551-10 | Repair of motor vehicles |
| | | | | 8619-07 | Miscellaneous repairs, n.e.c. |
| 127 | Personal household servoces | 9-168 | Personal household service | 8619-01 | Cleaning, laundries and dyeing services |
| | | | | 8619-02 | Barber shops |
| | | | | 8619-03 | Beauty shops |
| | | | | 8619-04 | Public baths |
| | | | | 8619-05 | Photo studios |
| | | | | 8619-06 | Funeral services |
| | | | | 8619-09 | Other personal services |
| 128 | Unspecified sector | 0-169 | Unspecified sector | 9000-00 | Activities not elsewhere classified |
| | | 0-170 | Dummy sector | | |

(Final demand)

| INDONESIA, I-O | | BUIO | | JAPAN, I-O | |
|----------------|------------------------------------|------|------------------------------------|------------|--|
| 301 | Private consumption expenditure | 001 | Private consumption expenditure | 9121-00 | Consumption expenditures of households |
| 302 | Government consumption expenditure | 002 | Government consumption expenditure | 9130-10 | Consumption expenditures of central government |
| | | | | 9130-20 | Consumption expenditures of local government |
| 303 | Gross fixed capital formation | 003 | Gross fixed capital formation | 9141-00 | Gross domestic fixed capital formation (government) |
| | | | | 9142-00 | Gross domestic fixed capital formation (private) |
| 304 | Change in stock | 004 | Change in stock | 9150-10 | Increase in finished goods of producer's stocks |
| | | | | 9150-20 | Increase in half-finished goods and work-in-progress |
| | | | | 9150-30 | Increase in goods of dealers' stocks |
| | | | | 9150-40 | Increase in raw material stocks and supplies |
| | | | | 9150-50 | Increase in unclassified stocks |

(Value added)

| INDONESIA, I-O | | BUIO | | JAPAN, I-O | |
|----------------|-------------------|------|-------------------|------------|---|
| 201 | Wage and salary | 201 | Wage and salary | 9311-000 | Wages and salaries |
| | | | | 9312-000 | Contribution of employers to social insurance |
| | | | | 9313-000 | Other payments and allowances |
| 202 | Operating surplus | 202 | Operating surplus | 9412-000 | Operating surplus |
| 203 | Depreciation | 203 | Depreciation | 9420-000 | Depreciation of fixed capital |
| 204 | Indirect tax | 204 | Indirect tax | 9430-000 | Indirect taxes (excluding custom duties) |
| 205 | Subsidy | 205 | Subsidy | 9440-000 | (Less) Current subsidies |

4. Abbreviations

| | |
|----------------------------|--|
| BIO table | Bilateral Input-Output table |
| BUIO sector classification | Bilateral Uniform Input-Output sector classification |
| CBS | Central Bureau of Statistics, Indonesia |
| CCCN | Custom Co-operation Council Nomenclature |
| CIF | Cost, Insurance and Freight |
| FOB | Free on Board |
| IDE | Institute of Developing Economies, Japan |
| IIO sector classification | Indonesian Input-Output sector classification |
| ISIC | International Standard Industrial Classification |
| JIO sector classification | Japanese Input-Output sector classification |
| ROW | the Rest of the World |

5. References

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