

11.F

Taiwan

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This documentation outlines the main procedure followed by the Directorate-General of Budget, Accounting and Statistics (*DGBAS*), Executive Yuan, Republic of China in preparing an updated Taiwan I-O table for GTAP. The 1996 Taiwan I-O table was obtained directly from the Division of Industrial Relations of *DGBAS*. The 1996 I-O data base is based on the 1996 R.O.C. Standard Industrial Classification. It is a 596 by 160 I-O table. The list of commodities in the 1996 *DGBAS* data base and the concordance to the GSC2 classification is given in Appendix table 11.F.A1.

The major steps involved in preparing a Taiwan I-O table for the GTAP data base from the existing Taiwanese I-O table involved:

- establishing a concordance between the Taiwan I-O table header arrays with the GTAP header arrays, and
- establishing a concordance for both commodities and industries between the Taiwan I-O table and the GTAP sectoral classification (GSC2).

References

Directorate-General of Budget, Accounting and Statistics. 2000. "1996 Input-Output Tables," Executive Yuan, R.O.C. Taipei.

Huff, K, R. McDougall, and T. Walmsley. 1999. "Contributing Input-Output Tables to the GTAP Data Base," Technical Paper No.1, Center for Global Trade Analysis.

Appendix

Table 11.F.A1 Commodity Concordance between GTAP GSC2 and 1996 Taiwan I-O

| GTAP GSC2 | 1996 Taiwan I-O (3-digit) | 1996 Taiwan I-O(5-digit) |
|---|---------------------------------|--|
| 01 Paddy rice | 001 Paddy rice | 01020 Services of agricultural machines |
| 02 Wheat | | 00210 Wheat |
| 03 Cereal grains n.e.c. | | 00230 Corn |
| | | 00295 By-products |
| 04 Vegetables, fruit, nuts | 005 Fruit | 00220 Sweet-potatoes |
| | 006 Vegetable | 01030 Irrigation |
| | 007 Other Horticultural Crops | |
| 05 Oil seeds | | 00431 Peanuts |
| | | 00439 Misc. crops for oil-making or beverage purpose |
| 06 Sugar cane, sugar beet | 003 Sugarcane | |
| 07 Plant-based fibers | | 00441 Raw cotton |
| | | 00449 Misc. fiber |
| 08 Crops n.e.c. | | 00410 Tea leaves |
| | | 00420 Tobacco |
| | | 00490 Other crops for processing |
| | | 00495 By-products |
| 09 Bovine cattle, sheep and goats, horses | | 00910 Cattle |
| | | 01010 Services of draft animals |
| | | 01090 Other agricultural services |
| 10 Animal products n.e.c. | 008 Hogs | 00940 Eggs |
| | | 00951 Chickens |
| | | 00959 Other poultry |
| | | 00960 Honey |
| | | 00990 Other livestock, hunting prod. & by-products |
| | | 01840 Animal hide & skins |
| 11 Raw milk | | 00930 Milk |
| 12 Wool, silk-worm cocoons | | 00920 Wool & hair, unkempt |
| 13 Forestry | 011 Forestry | |
| 14 Fishing | 012 Fisheries | |
| 15 Coal | 013 Coal | |
| 16 Oil | | 01410 Crude oil |
| | | 01440 Exploration expense |
| 17 Gas | | 01420 Natural gas |
| | | 01430 Geothermal energy |
| 18 Minerals n.e.c. | 015 Metallic Minerals | |
| | 016 Salt | |
| | 017 Other Non-Metallic Minerals | |

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Table 11.F.A1 Commodity Concordance between GTAP GSC2 and 1996 Taiwan I-O (continued)

| GTAP GSC2 | 1996 Taiwan I-O (3-digit) | 1996 Taiwan I-O(5-digit) |
|---|---|---|
| 19 Bovine cattle, sheep, goat, horse meat products | | 01820 Beef 01830 Other meat 01895 By-products |
| 20 Meat products n.e.c. | | 01810 Pork 02430 Canned meat & fish 02520 Frozen vegetables & fruit 03010 Processed fish & meat (exclude canned & frozen) |
| 21 Vegetable oils and fats | 019 Edible Oil & Fat By-Products | |
| 22 Dairy products | 028 Dairy products | |
| 23 Processed rice | 021 Rice | |
| 24 Sugar | 022 Sugar | |
| 25 Food products n.e.c. | 020 Flour 023 Animal feeds 024 Canned foods (excluding 02430) 025 Frozen foods (excluding 02520) 027 Seasonings 029 Sugar confectionery & bakery products 030 Misc. food products (excluding 03010) | |
| 26 Beverages and tobacco products | 031 Non-Alcoholic Beverages 032 Alcoholic Beverages 033 Tobacco | |
| 27 Textiles | 034 Cotton & Cotton Fabrics 035 Wool & Worsted Fabrics 036 Artificial Fabrics 037 Knitted Fabrics 038 Other Fabrics & Fabric Products 039 Printing, Dyeing & Finishing | |
| 28 Wearing apparel | 040 Tatted Garments 041 Knitted Garments 042 Fabric Products, Wearing Apparel & Accessories | |
| 29 Leather products | 043 Leather 044 Leather Footwear 045 Other Leather Products | |
| 30 Wood products | 046 Lumber 047 Plywood 048 Wood, Bamboo & Rattan Products | |
| 32 Petroleum, coal products | 066 Petroleum Refining Products 067 Coal Products | |

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Table 11.F.A1 Commodity Concordance between GTAP GSC2 and 1996 Taiwan I-O (continued)

| GTAP GSC2 | 1996 Taiwan I-O (3-digit) | 1996 Taiwan I-O(5-digit) | |
|---------------------------------------|----------------------------|---|------------------------|
| 33 Chemical, rubber, plastic products | 054 | Other Industrial Chemicals | |
| | 055 | Petrochemical Raw Materials | |
| | 056 | Chemical Fertilizers | |
| | 057 | Synthetic Fibers | |
| | 058 | Other Artificial Fibers | |
| | 059 | Plastics (Synthetic Resins) | |
| | 060 | Other Chemical Materials | |
| | 061 | Coatings | |
| | 062 | Medicines | |
| | 063 | Pesticides and Herbicides | |
| | 064 | Synthetic Detergents and Washing Preparations and Cosmetics | |
| | 065 | Misc. Chemical Manufactures | |
| | 068 | Rubber & Rubber Products | |
| | 069 | Plastic footwear | |
| | 065 | Misc. Chemical Manufactures | |
| | 068 | Rubber & Rubber Products | |
| | 069 | Plastic footwear | |
| | 070 | Other Plastic Products | |
| | 34 Mineral products n.e.c. | 071 | Ceramics |
| | | 072 | Glass & Glass Products |
| 073 | | Cement | |
| 074 | | Cement Products | |
| 075 | | Misc. Non-Metallic | |
| 35 Ferrous metals | 076 | Pig Iron & Crude Steel | |
| | 077 | Primary Iron & Steel Products | |
| 36 Metals n.e.c. | 078 | Aluminum | |
| | 079 | Miscellaneous Metals | |
| 37 Metal products | 080 | Metallic Products for Household Use | |
| | 081 | Metallic Hand Tools | |
| | 082 | Iron and Steel Products | |
| | 083 | Aluminum Products | |
| | 084 | Misc. Metallic Products | |
| | 085 | Surface Treating of Metal Products | |
| 38 Motor vehicles and parts | 107 | Motor Vehicle | |
| 39 Transport equipment n.e.c. | 106 | Shipbuilding | |
| | 108 | Motorcycles | |
| | 109 | Bicycles | |
| | 110 | Other Transport Equipment | |
| 40 Electronic equipment | 096 | Computer Products | |
| | 097 | Computer Peripheral Equipment | |
| | 098 | Data Storage Media | |
| | 099 | Computer Components | |
| | 100 | Video and Radio Electronic Products | |
| | 101 | Communication Apparatus | |
| | 102 | Electronic Tube | |
| 103 | Semi-conductors | | |

Table 11.F.A1 Commodity Concordance between GTAP GSC2 and 1996 Taiwan I-O (continued)

| GTAP GSC2 | 1996 Taiwan I-O (3-digit) | 1996 Taiwan I-O(5-digit) |
|--------------------------------------|---|------------------------------------|
| 41 Machinery and equipment n.e.c. | 086 General Industrial Machinery 087 Metal Processing Machinery 088 Industrial Machinery 089 Other Machinery 090 Machinery Parts, Repair & Maintenance 091 Household Electrical Appliances 092 Lighting Equipment 093 Power Generation, Transmission and Distribution Machinery 094 Wires & Cables 095 Other Electrical Materials 111 Precision Instruments & Apparatus | |
| 42 Manufactures n.e.c. | 049 Non-Metallic Furniture 112 Education & Entertainment Articles 113 Other Manufactures | |
| 43 Electricity | 114 Electricity | |
| 44 Gas manufacture, distribution | 115 Gas | |
| 45 Water | 116 City Water, Steam & Hot Water | |
| 46 Construction | 117 Residential Building Construction 118 Nonresidential Building Construction 119 Public Works 120 Other Construction | |
| 47 Trade | 121 Wholesale Trade 122 Retail Trade 123 Foreign Trade 124 Food & Beverage Services 138 Hotel Services 156 Vehicles Services 157 Other Repair Services | 16020 Scrap & second-hand goods |
| 48 Transport n.e.c. | 125 Railway Transportation 126 Other Land Transportation 129 Services Incidental to Transport 130 Travel Agency Services 131 Warehousing | |
| 49 Water transport | 127 Water Transportation | |
| 50 Air transport | 128 Air Transportation | |
| 51 Communication | 132 Postal Services 133 Telegram & Telephone | |
| 52 Financial services n.e.c. | 134 Finance 135 Security & Future | |
| 53 Insurance | 136 Insurance | |

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Table 11.F.A1 Commodity Concordance between GTAP GSC2 and 1996 Taiwan I-O (continued)

| GTAP GSC2 | 1996 Taiwan I-O (3-digit) | 1996 Taiwan I-O(5-digit) |
|---|--|---|
| 54 Business services n.e.c. | 137 House Services | |
| | 139 Real Estate Services | |
| | 140 Legal and Accounting Services | |
| | 141 Consulting Services | |
| | 142 Data processing & information services | |
| | 143 Advertising Services | |
| | 144 Renting & Lousing Services | |
| | 145 Misc. Services For Business | |
| | 149 Scientific Research & Services | |
| | 55 Recreational and other services | 154 Radio, Television & Movies Services |
| 155 Recreational & Cultural Services | | |
| 158 Household Services | | |
| 159 Other Personal Services | | |
| 56 Public administration and defense, education, health | 146 Public Administration Services | |
| | 147 Environmental Sanitary Services | |
| | 148 Educational Training Services | |
| | 150 Medical & Health Services | |
| | 151 Social Welfare Services | |
| | 152 Services of Civil Association | |
| 57 Dwellings(n.a.) | 153 Other Social Services | 16010 Undistributed |