

United States

Marinos Tsigas

1. Introduction

The United States input-output (I-O) accounts for the GTAP version 7 data base are derived from the data in the USAGE-ITC applied general equilibrium model with reference year 2002.

2. The 2002 USAGE-ITC Data

The data in the USAGE-ITC model are based on the 1992 benchmark I-O accounts published in 1997 by the Bureau of Economic Analysis (BEA), U.S. Department of Commerce (Lawson, November 1997). Dixon and Rimmer (2001) discuss in detail the transformations that they applied to the BEA accounts to obtain data for the USAGE-ITC model. These transformations are similar to those performed for the U.S. data in GTAP version 5 (Hanson and Somwaru, 2002). A difference between the USAGE-ITC data and the U.S. data in GTAP version 5 is that demands for goods in USAGE-ITC have been decomposed to demands for domestic and imported goods using unpublished worksheets from the BEA.

The 1992 USAGE-ITC data were updated to 2002 with two simulations with the USAGE-ITC model:

First, a simulation updated the data from 1992 to 1998 using I-O data (of smaller dimensions than the BEA accounts) from the Bureau of Labor Statistics. Dixon and Rimmer (2003 and 2004) discuss in detail this simulation;

Second, a simulation updated the data from 1998 to 2002 using GDP components, and export and import statistics and policies at the I-O sector level. Dixon, Rimmer and Tsigas (2004) discuss in detail this simulation.

3. Aggregating the USAGE-ITC Data to GTAP Sectors

The USAGE-ITC data have been aggregated to the GTAP data version 7 sectors following the mapping shown in Table 7.M.1. This mapping is the same with that in Hanson and Somwaru, 2002.

References

- Dixon, P.B., and M.T. Rimmer (2001), "MONASH-USA: Creating a 1992 Benchmark Input-Output database," Clayton, Centre of Policy Studies, Monash University, May.
- Dixon, P.B., and M.T. Rimmer (2003), "USAGE-ITC: Creating historical shocks for 1992 to 1998," Clayton, Centre of Policy Studies, Monash University.
- Dixon, P.B. and M.T. Rimmer (2004), "The US Economy from 1992 to 1998: Results from a Detailed CGE Model," *Economic Record* 80, Special Issue, S13-S23 (September).
- Dixon, P.B., M.T. Rimmer, and M. Tsigas (2004), "Creating a USAGE-ITC database for 2002," Clayton, Centre of Policy Studies, Monash University.
- Hanson, K. and A. Somwaru (2002), "Sources and Procedures for the Version 5 Data Base: United States," in Dimaranan, B. and McDougall, R., editors, *Global Trade, Assistance, and Production: The GTAP 5 Data Base*, Center for Global Trade Analysis, Purdue University, Indiana.
<https://www.gtap.agecon.purdue.edu/resources/download/645.pdf>
- Lawson, A.M. (1997), "Benchmark Input-Output Accounts for the U.S. Economy, 1992: Make, Use, and Supplementary Tables," *Survey of Current Business*, 77, 36-82, Washington DC, Bureau of Economic Analysis, U.S. Dept. of Commerce, November. <http://www.bea.gov/scb/pdf/national/inputout/1997/1197io.pdf>

Table 7.1 Aggregation Mapping for 1992 U.S. I-O Sectors to GTAP Sectors

GTAP Sectors			1992 U.S. I-O Sector Codes*
Number	Code	Description	
1	PDR	Paddy rice	14.3% of (20201)
2	WHT	Wheat	85.7% of (20201)
3	GRO	Cereal grains nec	(20202)
4	V_F	Vegetables, fruit, nuts	(020401, 020402, 020501)
5	OSD	Oil seeds	(20600)
6	C_B	Sugar cane, sugar beet	(20502)
7	PFB	Plant-based fibers	(20100)
8	OCR	Crops nec	(020203, 020300, 020503, 020701, 020702)
9	CTL	Bovine cattle, sheep and goats, horses	(10301)
10	OAP	Animal products nec	99.97% of (010200, 010302)
11	RMK	Raw milk	(10100)
12	WOL	Wool, silk-worm cocoons	0.03% of (010200, 010302)
13	FRS	Forestry	(30001)
14	FSH	Fishing	(30002)
15	COA	Coal	(70000)
16	OIL	Oil	48% of (80001)
17	GAS	Gas	52% of (80001)
18	OMN	Minerals nec	(050001, 060100, 060200, 090001, 090002, 090003, 090004, 100000)
19	CMT	Bovine meat products	(140101, 142700)
20	OMT	Meat products nec	(140102, 140105)
21	VOL	Vegetable oils and fats	(142400, 142500, 142600)
22	MIL	Dairy products	(140200, 140300, 140400, 140500, 140600)
23	PCR	Processed rice	(141600)
24	SGR	Sugar	(141900)
25	OFD	Food products nec	(140700, 140800, 140900, 141000, 141100, 141200, 141301, 141302, 141401, 141402, 141403, 141501, 141502, 141700, 141801, 141802, 141803, 142002, 142004, 142005, 142800, 142900, 143000, 143100, 143201, 143202)
26	B_T	Beverages and tobacco products	(142101, 142102, 142103, 142104, 142200, 142300, 150101, 150102, 150103, 150200)
27	TEX	Textiles	(160100, 160200, 160300, 160400, 170100, 170600, 170700, 170900, 171001, 171100, 190100, 190200, 190301, 190302, 190303, 190304, 190305, 190306)
28	WAP	Wearing apparel	(180101, 180102, 180201, 180202, 180203, 180300, 180400)
29	LEA	Leather products	(330001, 340100, 340201, 340202, 340301, 340302, 340303, 340304, 340305)

continued

Table 7.1 Aggregation Mapping for 1992 U.S. I-O Sectors to GTAP Sectors (continued)

GTAP Sectors			1992 U.S. I-O Sector Codes*
Number	Code	Description	
30	LUM	Wood products	(200100, 200200, 200300, 200400, 200501, 200502, 200600, 200701, 200702, 200703, 200800, 200901, 200903, 200904, 210000, 220101, 220102, 220103, 220200, 220300, 220400, 230100, 230200, 230300, 230400, 230500, 230600, 230700)
31	PPP	Paper products, publishing	(240100, 240400, 240500, 240701, 240702, 240703, 240705, 240706, 240800, 250000, 260100, 260200, 260301, 260302, 260400, 260501, 260601, 260602, 260700, 260802, 260803, 260806)
32	P_C	Petroleum, coal products	(310101, 310102, 310103, 310200, 310300)
33	CRP	Chemical, rubber, plastic products	(270100, 270201, 270202, 270300, 270401, 270402, 270403, 270404, 270405, 270406, 280100, 280200, 280300, 280400, 290100, 290201, 290202, 290203, 290300, 300000, 320100, 320200, 320300, 320400, 320500, 320600)
34	NMM	Mineral products nec	(350100, 350200, 360100, 360200, 360300, 360400, 360500, 360600, 360701, 360702, 360800, 360900, 361000, 361100, 361200, 361300, 361400, 361500, 361600, 361700, 361900, 362000, 362100, 362200)
35	I_S	Ferrous metals	(370101, 370102, 370103, 370104, 370105, 370200, 370300, 370401, 370402)
36	NFM	Metals nec	(380100, 380400, 380501, 380600, 380700, 380800, 380900, 381000, 381100, 381200, 381300, 381400)
37	FMP	Metal products	(390100, 390200, 400100, 400200, 400300, 400400, 400500, 400600, 400700, 400800, 400901, 400902, 410100, 410201, 410202, 410203, 420100, 420201, 420202, 420300, 420401, 420402, 420500, 420700, 420800, 421000, 421100)
38	MVH	Motor vehicles and parts	(590301, 590302, 590100, 590200)
39	OTN	Transport equipment nec	(600100, 600200, 600400, 610100, 610200, 610300, 610500, 610601, 610603, 610700)
40	ELE	Electronic equipment	(510102, 510103, 510104, 510400, 560100, 560200, 560300, 560500, 570100, 570200, 570300)

continued

Table 7.1 Aggregation Mapping for 1992 U.S. I-O Sectors to GTAP Sectors (continued)

GTAP Sectors			1992 U.S. I-O Sector Codes*
Number	Code	Description	
41	OME	Machinery and equipment nec	(430100, 430200, 440001, 440002, 450100, 450200, 450300, 460100, 460200, 460300, 460400, 470100, 470200, 470300, 470401, 470402, 470404, 470405, 470500, 80100, 480200, 480300, 480400, 480500, 480600, 490100, 490200, 490300, 490500, 490600, 490700, 490800, 500100, 500200, 500300, 500400, 520100, 520200, 520300, 520400, 520500, 530200, 530300, 530400, 530500, 530700, 530800, 540100, 540200, 540300, 540400, 540500, 540700, 550100, 550200, 550300, 580100, 580200, 580400, 580600, 580700, 620101, 620102, 620200, 620300, 620400, 620500, 620600, 620700, 620800, 620900, 621000, 621100, 630200, 630300, 130100, 130200, 130300, 130500, 130600, 130700, 810001, 810002)
42	OMF	Manufactures nec	(640101, 640102, 640104, 640105, 640200, 640301, 640302, 640400, 640501, 640502, 640503, 640504, 640700, 640800, 640900, 641000, 641100, 641200)
43	ELY	Electricity	(680100, 780200, 790200)
44	GDT	Gas manufacture, distribution	(680202)
45	WTR	Water	(680301, 680302)
46	CNS	Construction	(110101, 110102, 110105, 110108, 110400, 110501, 110601, 110602, 110603, 110800, 110900, 120101, 120214, 120215, 120300)
47	TRD	Trade	(690100, 690200, 720101, 720102, 720201, 720202, 720203, 720204, 720205, 720300, 750001, 750002, 750003)
48	OTP	Transport nec	(650100, 650200, 650301, 650302, 650600, 650701, 650702, 680201)
49	WTP	Water transport	(650400)
50	ATP	Air transport	(650500)
51	CMN	Communication	(660100, 660200, 670000)

continued

Table 7.1 Aggregation Mapping for 1992 U.S. I-O Sectors to GTAP Sectors (continued)

GTAP Sectors			1992 U.S. I-O Sector Codes*
Number	Code	Description	
52	OFI	Financial services nec	(700100, 700200, 700300, 730301, 730302, 730303)
53	ISR	Insurance	(700400, 700500)
54	OBS	Business services nec	(710201, 710202, 730101, 730102, 730103, 730104, 730106, 730107, 730108, 730109, 730111, 730112, 730200)
55	ROS	Recreational and other services	(740000, 760101, 760102, 760201, 760202, 760203, 760204, 760205, 760206)
56	OSG	Public Administration, Defense, Education, Health	(040001, 040002, 770100, 770200, 770301, 770303, 770304, 770305, 770401, 770402, 770403, 770501, 770502, 770503, 770504, 770600, 770700, 770800, 770900, 780100, 780500, 790100, 790300, 800000, 820000, 830000, 840000, 850000)
57	DWE	Dwellings	(710100)

* See Appendix A in Lawson (1997) for the 1992 U.S. I-O sector codes.