

11.L

The Netherlands

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11.L.1 Original I-O Table

The source data are the 2001 industry-by-industry domestic use matrices and the industry-by-industry imports use matrices both in producers' and basic prices, compiled by the Statistics Netherlands (SN) Division of National Accounts. The table in producers' prices is considered to be at agents' prices in GTAP terminology whereas basic prices refer to GTAP market prices. These matrices detail 106 sectors. The construction of a concordance with the GTAP sectoral classification (GSC2) involves separate mapping procedures for agricultural sectors, some food sectors, and non-agricultural sectors. For the non-agricultural sector, the procedure is a one of aggregation (see appendix table 11.L.A1). For agriculture and some food sectors, the principal task is to disaggregate these sectors of the Netherlands I-O table into the sectors represented in GSC2.

The contribution of the Netherlands 2001 input-output table for the GTAP 6 Data Base is a joint effort of the Agricultural Economics Research Institute (LEI) and Netherlands Bureau for Economic Policy Analysis (CPB). This contribution benefits from the inclusion of a new table in the source data on re-exports of goods per sector, a substantial part of trade of the Dutch economy. Information about implementing this information in the GTAP Data Base is available in chapter 15.C.

11.L.2 Agricultural and Some Food Sectors

The original I-O table from SN is an industry-by-industry table. We therefore had to transform the industry-by-industry concept with the commodity-by-commodity concept for the agricultural sectors and some food sectors.

To split the agricultural industries by commodities, we obtained from SN a split over the rows of the commodities delivered by industries in accordance with the GTAP classification¹. We used this specification to split the industries 1 – 4 (the primary agricultural industries), industry 10 (slaughtering) and industry 15 (the other food industries). This split by SN gave us consistent results for the delivery structure of the commodities.

¹ We thank Mr. R.P. van der Wal from Statistics Netherlands for his cooperation.

As a remainder we had to split the columns of these industries into the same commodity classification. The main sources for the split of the columns are components of the standard gross margin 2000 (fertilizer, crop protection, concentrates, etc.), farm structure survey 2001, production value, and common sense. As a final step, we summed up all the categories in the rows and columns which belong to the same GTAP sector.

11.L.3 Taxes, Trade and Transport Margins

The availability of tables both at agents prices and market prices has given us a fairly easy tool to calculate the required tax arrays (AI16, AI17, AI18, AI19, AI20, AI21, AI22, AI23, AI25 and AI26). More information is needed to split the rows and columns of trade and transport margins over the GTAP sectors. Unfortunately, we were not able to come up with a good solution to assign these margins over imports and domestic use and also to divide them over the sectors. This is a rather serious problem because these margins form a substantial percentage (more than 7%) of Dutch production. Together with information from Everett Peterson and from the Dutch national statistics, we hope to gather enough information to include these margins in the forthcoming GTAP margins dataset. For the time being we have included the margins in the domestic and export trade (TRD) sector.

References

- Dimaranan, Betina V. and Robert A. McDougall. 2002. Global Trade, Assistance, and Production: The GTAP 5 Data Base, Center for Global Trade Analysis, Purdue University.
- Huff, Karen, Robert McDougall and Terrie Walmsley. 2000. Contributing Input-Output Tables to the GTAP Data Base, GTAP Technical Paper No. 1, Center for Global Trade Analysis, Purdue University.
- Peterson, Everett. 2004. "A Comparison of Marketing Margins Across Sectors, Users, and Regions," Paper presented at the Seventh Annual Conference on Global Economic Analysis, Washington DC, United States.
- Statistics Netherlands. 2001. Input-Output Tables for the Netherlands 2001, Statistics Netherlands, Voorburg.
- Statistics Netherlands. 2003. National Accounts of the Netherlands 2003, Statistics Netherlands, Voorburg.

Appendix

Table 11.L.A1 Concordance between GSC2 and Netherlands I-O Table

Statistics Netherlands Classification		GTAP	
		Sectors	Description*
1	Akkerbouw	1-12+54	Growing of cereals and other crops not elsewhere classified
2	Tuinbouw	1-12+54	Growing of market gardening; horticulture
3	Veehouderij	1-12+54	Farming of animals
4	Overig landbouw	1-12+54	Growing of crops combined with farming of animals
5	Hoveniers en agrarische dienstverlening	54 OBS	Landscape gardening and agricultural services
6	Bosbouw en jacht	13 FRS	Forestry and hunting
7	Visserij	14 FSH	Fishing
8	Aardolie en aardgaswinning	15 COA 16 OIL 17 GAS	Extraction of Crude Petroleum and Natural Gas
9	Delfstoffen overig	18 OMN	Other mining activities
10	Slachterijen	19 CMT 20 OMT 21 VOL 25 OFD	Slaughtering
11	Visverwerking	25 OFD	Processing and preserving of fish and fish products
12	Groente-en fruitverwerking	25 OFD	Processing and preserving of fruit and vegetables
13	Vervaardiging van zuivelprodukten	25 OFD	Manufacture of dairy products
14	Vervaardiging veevoer	25 OFD	Manufacture of prepared animal feeds
15	Vervaardiging overige voedingsmiddelen	6 C_B 9 CTL 19 CMT 21 VOL 22 MIL 23 PCR 24 SGR 25 OFD	Manufacture of other food products
16	Kofflebranderijen en theepakkerijen	26 B_T	Manufacturing of coffee and processing of tea
17	Vervaardiging van dranken	26 B_T	Manufacturing of other beverages
18	Ververking van tabak	26 B_T	Manufacture of Tobacco Products
19	Textiel	27 TEX	Manufacture of Textiles
20	Confectie	28 WAP	Manufacture of Wearing Apparel
21	Leder(waren) en schoeisel	29 LEA	Manufacture of Leather and Leather Products
22	Hout, kurk, riet en viechtwerk	30 LUM	Manufacture of Wood and Wood Products
23	Pulp, papier en karton	31 PPP	Manufacture of Pulp, Paper and Paper board
24	Papier-en kartonwaren	31 PPP	Manufacture of articles of paper and paperboard
25	Uitgeverijen en drukkerijen	31 PPP	Publishing and printing
26	Reproductie van opgenomen media	31 PPP	Reproduction of Recorded Media

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Table 11.L.A1 Concordance between GSC2 and Netherlands I-O Table (Contd)

		GTAP	
Statistics Netherlands Classification		Sectors	Description*
27	Aardoliever werking, splijt-en kweekstoffen, cokes	32 P_C	Manufacture of Coke, Refined Petroleum Products and Nuclear Fuel
28	Chemie basis	33 CRP	Manufacture of basic chemicals
29	Chemie anorganisch	33 CRP	Anorganic chemicals
30	Petrochemie	33 CRP	Petrochemicals
31	Kunstmest	33 CRP	Artificial fertilisers
32	Chemie eind	33 CRP	Final Chemicals
33	Rubber en kunststof	33 CRP	Manufacture of Rubber and Plastic Products
34	Bouwmaterialen	34 NMM	Manufacture of Building Materials
35	Basismetaal	35 I_S	Manufacture of Basic Metals
		36 NFM	
36	Metaalprodukten	37 FMP	Manufacture of Fabricated Metal Products
37	Machines en apparaten	41 OME	Manufacture of Machinery and Equipment
38	Huishoudelijke apparaten	40 ELE	Manufacture of Home Appliances
39	Kantoomachines en computers	40 ELE	Manufacture of Office Machines and Computers
40	Overige elektrische machines en apparaten	42 OMF	Other electrical appliances
41	Audio-, video- en telecommunicatie-apparatuur	40 ELE	Manufacture of Radio, Television and Communication Equipment Apparatus
42	Medische, meet- en regelapparatuur	41 OME	Manufacture of Medical, Precision and Optical Instruments
43	Auto-industrie	38 MVH	Car-industry
44	Scheepbouw	39 OTN	Building of Ships
45	Spoorwegmaterieel, vlieg- en ruimtevaartuigen	39 OTN	Manufacture of railway and tramway locomotives and aircraft and spacecraft
46	Transportmiddelen overig	39 OTN	Other transport equipment
47	Meubels en matrassen	42 OMF	Manufacture of furniture
48	Goederen overig n.e.g.	42 OMF	Other Goods, NEC
49	Vorbereiding tot recycling	42 OMF	Recycling
50	Elektriciteitsbedrijven	43 ELY	Production and distribution of electricity
51	Gasdistributie	44 GDT	Manufacture and distribution of gas
52	Waterwinning en distributie	45 WTR	Collection, purification and distribution of water
53	Bouwrijp maken van terreinen	46 CNS	Site preparation
54	Burgerlijke en utiliteitsbouw	46 CNS	Civil engineering
55	Grond-, water- en wegenbouw	46 CNS	Construction of motorways, roads, railways and water projects
56	Bouwinstallatie	46 CNS	Building installation
57	Bouwafwerking	46 CNS	Building completion
58	Verhuur van bouw- en sloopmachines	54 OBS	Renting of construction or demolition equipment
59	Autogroothandel	47 TRD	Sale of motor vehicles (wholesale)
60	Autodetailhandel	47 TRD	Sale of motor vehicles parts and accessories (retail)
61	Autoservicebedrijven en benzineservicestations	54 OBS	Maintenance and repair of motorcycles and related parts and accessories

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Table 11.L.A1 Concordance between GSC2 and Netherlands I-O Table (Contd)

Statistics Netherlands Classification		GTAP	
		Sectors	Description*
62	Groothandel	47 TRD	Wholesale trade
63	Detailhandel	47 TRD	Retail trade
64	Horeca	47 TRD	Hotel and catering industry
65	Openbaar vervoer	48 OTP	Public Transport
66	Goederenvervoer	48 OTP	Transport of Goods
67	Vervoer via pijpleidingen	48 OTP	Transport by Pipelines
68	Zeevaart	49 WTP	Sea and Coastal Water Transport
69	Binnenvaart	49 WTP	Inland Water Transport
70	Luchtvaart	50 ATP	Air Transport
71	Dienstverlening vervoer land	54 OBS	Service for Transport over Land
72	Dienstverlening vervoer water	54 OBS	Service for Transport over Water
73	Dienstverlening vervoer lucht	54 OBS	Service for Transport over Air
74	Reisbureaus	55 ROS	Travel agencies
75	Post en telecommunicatie	51 CMN	Post and Telecommunications
76	Bankwezen	52 OFI	Banks
77	Verzekeringswezen	53 ISR	Insurances
78	Financiële hulpbedrijven	52 OFI	Auxiliary Financial Intermediates
79	Exploitatie woningen	57 DWE	Exploitation of houses
80	Overig onroerend goed	57 DWE	Other real Estate
81	Verhuur roerende goederen	54 OBS	Renting of moveable goods
82	Computerservice	54 OBS	Computer services
83	Speur- en ontwikkelingswerk	54 OBS	Research and Development
84	Juridische, boekhoudkundige, economische dienstverl	54 OBS	Legal, accounting and other economic services
85	Ingenieurs en architecten	54 OBS	Architectural and engineering activities
86	Reclamebureaus	54 OBS	Advertising
87	Uitzenbureaus en arbeidsbemiddeling	54 OBS	Labour recruitment and provision of personnel
88	Reiniging gebouwen	54 OBS	Cleaning of buildings
89	Overige zakelijke dienstverlening	54 OBS	Other business services
90	Algemeen bestuur, rijk	56 OSG	Administration of the State
91	Algemeen bestuur, gemeente	56 OSG	Administration of the Municipality
92	Overig algemeen bestuur en sociale verzekering	56 OSG	Other public administration and social insurance
93	Defensie	56 OSG	Defence Activities
94	Wetenschappelijk onderwijs	56 OSG	Scientific Education
95	Bijzonder onderwijs	56 OSG	Special Education
96	Overig gesubsidieerd onderwijs	56 OSG	Other subsidised Education
97	Medische dienstverlening	56 OSG	Medical Services
98	Welzijnszorg	56 OSG	Social Work
99	Milieudienstverlening bedrijven	54 OBS	Environmental Services- Businesses
100	Milieudienstverlening overheid	56 OSG	Environmental Services- Government

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Table 11.L.A1 Concordance between GSC2 and Netherlands I-O Table (Contd)

Statistics Netherlands Classification		GTAP Sectors	Description*
101	Cultuur, sport, recreatie, radio en televisie	55 ROS	Recreational, Cultural and Sporting Activities
102	Gokwezen	55 ROS	Gamble - work
103	Dienstverlening overig	55 ROS	Other Services
104	Huishoudelijke diensten	55 ROS	Household Services
105	Goederen en diensten n.e.g.	54 OBS	Goods and services NEC
106	Correcties ivm loon in natura	54 OBS	Correction for Wage in kind
Remainder of the Rows			
109	Invoerrechten		Import Duties
110	Subsidies op invoer	AI17	Subsidies on Imports
111	Overige belastingen op invoer	AI17	Taxes on Imports
113	Niet-afrekbare BTW	AI12	Non-Deductible VAT
114	Handels- en vervoersmarges		Trade margins
116	Productgebonden belastingen	AI16	Product Specific Taxes
117	Productgebonden subsidies	AI16	Product Specific Subsidies
118	Niet-productgebonden belastingen	AI12	Non-Product Specific Taxes
119	Niet-productgebonden subsidies	AI12	Non-Product Specific Subsidies
120	Lonen	AI13	Wages
121	Sociale premies werkgevers	AI13	Social Premium - Insurances paid by Employers
122	Exploitatie-overschot	AI14	Surplus
124	Verkopen van gebruikte vaste activa	54 OBS	Selling of Used Fixed Assets
125/	Uitvoersaldo goederen zonder	54 OBS	Export Surplus of Goods without border crossing
127	grensoverschrijding		
Remainder of the Columns			
107	Uitvoer van goederen (fob) en diensten		Export of goods (fob) and services
108	Consumptieve bestedingen door huishoudens		Household consumption
109	Consumptieve bestedingen door izw tbv huishoudens		Household consumption
110	Sociale uitkeringen in natura door de overheid		Government consumption
111	Consumptieve bestedingen eigen productie overheid		Government consumption
112	Investerings in vaste activa (bruto)		Investment usages
113	Veranderingen in voorraden (incl_kostbaarheden)		Change in stocks
114	handels-en vervoersmarges		Trade margins
115	consumptie Nederlandse huishoudens in buitenland		Household consumption
116	Afgedragen minus toegerekende BTW	54 OBS	
117	Toegerekende bankdiensten	54 OBS	

* The descriptions are from the UK Standard Industrial Classification of Economic Activities and are used mainly as source of translation.