

11.C

New Zealand

Gerard Malcolm and Allan Rae

The input-output table incorporated in the previous version of the GTAP Data Base was derived from the 1992/93 input-output data for New Zealand. For the GTAP 6 Data Base, the Centre for Applied Economics and Policy Studies at Massey University, with funding from Venture Trust, has undertaken to provide updated input-output data using the New Zealand Inter-Industry Study of 1996 Interim Release of Tables. Details of this Study are available at the Statistics New Zealand website (<http://www.stats.govt.nz>). This paper describes the methods used to adjust the 1996 data in order to make them compatible with the GTAP framework. In doing so, the direction of “Contributing Input-Output Tables to the GTAP Data Base” by Huff, Karen, Robert McDougall and Terrie Walmsley, GTAP Technical Paper No. 1 (2000) was followed, along with information supplied on the GTAP website (<http://www.gtap.org>). The helpful cooperation of Barry Voice from Statistics New Zealand, and Terrie Walmsley at the GTAP Project, is gratefully acknowledged.

11.C.2 Sectoral Concordance

The input-output data used as a base for this analysis is presented in two forms: as money flow and as product flow tables. For the purposes of the GTAP Data Base, the product flow tables are regarded as more relevant. These tables are found in the Inter-Industry Study 1996 Interim Release of Tables as Table 3 (Imports into industries and categories of final demand in basic prices) and Table 4 (Inter-industry Transactions in basic prices). The classifications in the tables are 210 Commodities by 126 Industries for Table 3 and 126 Industries by 126 Industries for Table 4. The industry mapping and the commodity mapping in the Inter-Industry study are given in Tables 11.C.A2 and 11.C.A3, respectively, in the Appendix.

As the original data is at a higher level of disaggregation than required for the GTAP 6 Data Base, conversion from the New Zealand I-O format to the GTAP format typically involves aggregating the data supplied. However, in some cases relating mostly to agricultural industries, the GTAP Data Base requires more disaggregation than is provided in the I-O data. In these cases, the industries were split on a pro-rata basis, with the applicable proportions based on independent sources of agricultural data on total output of each industry for 1996. Some manual adjustments to the agricultural sectors were also made, as follows:

- Intermediate usage of Sheep and Beef Cattle Farming (I-O industry 6) products by Meat Processing (I-O industry 19) is allocated entirely to the GTAP commodity CTL (GSC 9),

- Intermediate usage of Sheep and Beef Cattle Farming (I-O industry 6) products by Textile Manufacturing (I-O industry 29) is allocated entirely to the GTAP commodity WOL (GSC 12),
- The remaining intermediate inputs to the two industries CTL and WOL were split in the proportions 33% and 67%, respectively. This is necessary to ensure that the overall total intermediate usage values are consistent with the target proportions of 74% and 26%, respectively.
- Employment of Capital (AI14) for GTAP commodity WHT (GSC 2) was reduced by \$5 million from \$25.1 million to \$20.1 million. This adjustment was made to ensure overall balance for this industry remains within the required range.

As in the previous I-O table, the Oil and Gas Industries are not separated. These sectors were manually disaggregated to provide a sensible product flow between the extraction, processing and distribution industries.

Table 11.C.A1 shows the mapping between the New Zealand I-O industries and commodities and the GTAP industries. The fourth column shows the proportion of I-O industries allocated to the GTAP industries in cases where pro-rata allocation is done. Figures are not shown in this column in the cases where a given I-O industry is allocated in its entirety to a single GTAP industry.

11.C.2 Data Adjustments

Data is supplied on Operating Surplus and Consumption of Fixed Capital. These two figures are summed for each industry to provide a total for Employment of Capital (AI14). Unlike the previous version of the table (1992/93), no negative values occur for any of the industries (this may be because the base data used is product flow data). No data is available on Employment of Land, so this array (AI15) is set at zero.

Import Duty values are provided separately by Statistics NZ for the most important commodities on which duties are levied. The approximate import duties by GTAP commodity are: beverages and tobacco (GSC 26) - \$81 million; wearing apparel (GSC 28) - \$113 million; petroleum and coal products (GSC 32) - \$210 million; chemicals, rubber and plastic products (GSC 33) - \$15 million; motor vehicles and parts (GSC 38) – \$248 million; and electronic equipment (GSC 40) – \$17 million. The remainder (\$121 million) of the total Import Duty Paid is allocated pro-rata across the remaining industries according to the value of imports for each.

Other data on Commodity Taxes (“Taxes on Products”) is available at an aggregate level only. Import Duty is netted out of the total values reported for Commodity Taxes. These taxes are allocated across the various Commodity Tax arrays (AI17 – AI25) in a pro-rata fashion according to the values of the money flows in the equivalent categories of expenditure.

References

- 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.
- Malcolm, Gerard. 1998. "New Zealand," Chapter 14.9 in McDougall, Robert, Aziz Elbehri, and Truong P. Truong (Editors), *Global Trade, Assistance, and Protection: The GTAP 4 Data Base*, Center for Global Trade Analysis, Purdue University.

Appendix

Table 11.C.A1 Industrial Classifications and Mapping

GTAP Commodity Number	GTAP Commodity Code	NZSIC Industries	Proportion Allocated	NZSIC Commodities
1	PDR	0		
2	WHT	5	13%	11
3	GRO	5	23%	
4	V_F	1, 2, 3, 4		1, 2, 3, 4, 6, 7
5	OSD	0		5
6	C_B	0		
7	PFB	0		
8	OCR	0		12, 13
9	CTL	6	74%	8, 9
10	OAP	8		15, 16, 17, 18, 19
11	RMK	7		14
		5	65%	
12	WOL	6	26%	10
13	FOR	10, 11, 12		21, 22, 23, 24
14	FSH	13		26, 27, 29
15	COL	14, 15		30
16	OIL	17, 18 (manual split)	45%	40, 41 (manual split)
17	GAS	17, 18 (manual split)	55%	40, 41 (manual split)
18	OMN	16		31, 32, 33, 34, 35, 36, 37, 39
19	CMT	19	90%	42
20	OMT	20, 21		43, 44, 45
		19	10%	
21	VOL	23		53
22	MIL	22		46, 47, 48
23	PCR	0		
24	SGR	24		58
25	OFD	25, 26		49, 50, 51, 52, 54, 55, 56, 57, 59, 60, 61
26	B_T	27, 28		62, 63
27	TEX	29		64, 65, 66, 67, 68, 69, 70, 71
28	WAP	30, 31		73, 74, 75, 76
29	LEA	32		72
30	LUM	33, 34		77, 78, 79, 80, 81, 82
31	PPP	35, 36, 37		83, 84, 85, 86, 87
32	P_C	38, 39		88
33	CRP	40, 41, 42, 43, 44, 45		89, 90, 91, 92, 93, 97, 98
34	NMM	46, 47		94, 95, 96, 99, 100, 101, 102
35	I_S	48	50%	104
36	NFM	48	50%	103, 105
37	FMP	49		106, 107, 108, 109
38	MVH	50		110, 111, 112
39	OTN	51, 52		113, 114, 115, 116
40	ELE	53, 54		122, 123, 124, 125, 126, 127
41	OME	55, 56		117, 118, 119, 120, 121, 128, 129
42	OMF	57, 58, 59		130, 131, 132, 133, 134, 135, 136
43	ELY	60, 61, 62		138

Continued

Table 11.C.A1 Industrial Classifications and Mapping (Contd)

GTAP Commodity Number	GTAP Commodity Code	NZSIC Industries	Proportion Allocated	NZSIC Commodities
44	GDT	63		
45	WTR	64		140
46	CNS	65, 66, 67, 68, 69, 70, 71, 72, 73, 74		141, 142, 143, 144, 145, 146, 147, 148, 149, 150, 151
47	TRD	75, 76, 77, 78		152, 153, 155, 156, 157, 158, 220
48	OTP	79, 80		159, 160
49	WTP	81		162
50	ATP	82		163
51	CMN	83		164
52	OFI	84		165
53	ISR	85, 86, 87, 88, 89		166, 167, 168, 169
54	OBS	9, 90, 91, 92, 94, 95, 96, 97, 98, 99, 100, 101, 102, 103, 104, 105		20, 25, 28, 38, 137, 139, 154, 161, 170, 171, 172, 173, 175, 176, 177, 178, 179, 180, 181, 182, 183, 184, 185, 186, 187, 188
55	ROS	120, 121, 122, 123, 124, 125, 126		203, 204, 205, 206, 207, 208, 209
56	OSG	106, 107, 108, 109, 110, 111, 112, 113, 114, 115, 116, 117, 118, 119		189, 190, 191, 192, 193, 194, 195, 196, 197, 198, 199, 200, 201, 202
57	DWE	93		174

Table 11.C.A2 Industry Mapping in the Inter-industry Study 1996

49 Industry Tables		126 Industry Tables		ANZSIC
Industry Grouping	Row/Column Reference Number	Industry Grouping	Row/Column Reference Number	
Horticulture and fruit growing	1	Other horticulture	1	A011100, A011200, A011300
		Apple and pear growing	2	A011500
		Kiwi fruit growing	3	A011700
Livestock and cropping farming	2	Other fruit growing	4	A011400, A011600, A011910, A011920, A011990
		Mixed livestock and cropping	5	A012100, A012200, A015910
		Sheep and beef cattle farming	6	A012300, A012400, A012500
Dairy cattle farming	3	Dairy cattle farming	7	A013000
Other farming	4	Other farming	8	A014100, A014200, A015100, A015200, A015300, A015930, A015990, A016910, A016920, A016990
Services to agriculture, hunting and trapping	5	Services to agriculture, hunting and trapping	9	A021200, A021300, A021900, A022000
Forestry and logging	6	Forestry	10	A030100
		Services to forestry	11	A030300
		Logging	12	A030200
Fishing	7	Fishing	13	A041100, A041300, A041400, A041500, A041900, A042000
Mining and quarrying	8	Coal mining	14	B110100, B110200
		Services to mining	15	B151400, B152000
		Other mining and quarrying	16	B131100, B131200, B131300, B131400, B131500, B131600, B131700, B131900, B141100, B141900, B142000
Oil & gas exploration & extraction	9	Oil & gas extraction	17	B120000
		Oil & gas exploration	18	B151100, B151200
Meat and meat product manufacturing	10	Meat processing	19	C211100
		Poultry processing	20	C211200

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Table 11.C.A2 Industry Mapping in the Inter-industry Study 1996 (Contd)

49 Industry Tables		126 Industry Tables	
Industry Grouping	Row/Column Reference Number	Industry Grouping	Row/Column Reference Number
			ANZSIC
Meat and meat product manufacturing (Contd)	10	Bacon, ham and small good manufacturing	21 C211300
Dairy product manufacturing	11	Dairy product manufacturing	22 C212100, C212200, C212900
Other food manufacturing	12	Fruit and vegetable, oil and fat, cereal and flour manufacturing	23 C213000, C214000, C215100, C215200
		Bakery, sugar and confectionery manufacturing	24 C216100, C2162000, C2163000, C217100, C217200
		Seafood processing	25 C217300
		Other food manufacturing	26 C217400, C217900
Beverage, malt and tobacco manufacturing	13	Soft drink, cordial and syrup manufacturing	27 C218100
		Beer, wine, spirit and tobacco manufacturing	28 C218200, C218300, C218400, C219000
Textile and apparel manufacturing	14	Textile manufacturing	29 C221100, C221200, C221300, C221400, C221500, C222100, C222200, C222300, C222900, C223100, C223200, C223900
		Clothing manufacturing	30 C224000
		Footwear manufacturing	31 C225000
		Other leather product manufacturing	32 C226110, C226120, C226200
Wood product manufacturing	15	Log sawmilling and timber dressing	33 C231100, C231200, C231300
		Other wood product manufacturing	34 C232100, C232200, C232300, C232900
Paper and paper product manufacturing	16	Paper and paper product manufacturing	35 C233100, C233200, C233300, C233400, C233900

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Table 11.C.A2 Industry Mapping in the Inter-industry Study 1996 (Contd)

49 Industry Tables		126 Industry Tables	
Industry Grouping	Row/Column Reference Number	Industry Grouping	Row/Column Reference Number
Printing, publishing & recorded media	17	Printing and services to printing	36
Petroleum and industrial chemical manufacturing	18	Publishing and recorded media manufacturing	37
Rubber, plastic and other chemical product manufacturing	19	Petroleum refining	38
		Petroleum & coal product manufacturing nec	39
		Fertilizer manufacturing	40
		Other industrial chemical manufacturing	41
		Medicinal, detergent and cosmetic manufacturing	42
		Other chemical product manufacturing	43
		Rubber manufacturing	44
		Plastic product manufacturing	45
Non-metallic mineral product manufacturing	20	Glass and glass product and ceramic manufacturing	46
		Other non-metallic mineral product manufacturing	47
Basic metal manufacturing	21	Basic metal manufacturing	48
Structural, sheet, and fabricated metal product manufacturing	22	Structural, sheet and fabricated metal product manufacturing	49

Continued

Table 11.C.A2 Industry Mapping in the Inter-industry Study 1996 (Contd)

49 Industry Tables		126 Industry Tables		ANZSIC
Industry Grouping	Row/Column Reference Number	Industry Grouping	Row/Column Reference Number	
Transport equipment manufacturing	23	Motor vehicle and part manufacturing	50	C281100, C281200, C281300, C281900
		Ship and Boat Building	51	C282100, C282200
		Other transport equipment manufacturing	52	C282300, C282400, C282900
Machinery and equipment manufacturing	24	Photographic and scientific equipment manufacturing	53	C283100, C283200, C283900
		Electronic equipment and appliance manufacturing	54	C284100, C284200, C284900, C285100, C285200, C285300, C285400, C285900
		Agricultural machinery manufacturing	55	C286100
Furniture and other manufacturing	25	Other industrial machinery and equipment manufacturing	56	C286200, C286300, C286400, C286500, C286600, C286700, C286900
		Prefabricated building manufacturing	57	C291100, C291900
		Furniture manufacturing	58	C292100, C292200, C292300, C292900
		Other manufacturing	59	C294100, C294200, C294900
Electricity generation and supply	26	Electricity Generation	60	D361000pt
		Electricity Transmission	61	D361000pt
		Electricity Supply	62	D361000pt
Gas supply	27	Gas supply	63	D362000
Water supply	28	Water supply	64	D370100
Construction	29	Residential building construction	65	E411100pt, E411200pt
		Owner builders	66	E411100pt, E411200pt
		Non-residential building construction	67	E411300
		Non-building construction	68	E412100, E412200

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Table 11.C.A2 Industry Mapping in the Inter-industry Study 1996 (Contd)

49 Industry Tables		126 Industry Tables	
Industry Grouping	Row/Column Reference Number	Industry Grouping	Row/Column Reference Number
Construction (Contd)	29	Site preparation services	E421000
		Building structure services	E422100, E422200, E422300, E422400
		Plumbing services	E423100
		Installation trade services	E423200, E423300, E423400
		Building completion services	E424100, E424200, E424300, E424400, E424500
Wholesale trade	30	Other construction services	E425100, E425900
		Wholesale trade	F451100, F451200, F451900, F452100, F452200, F452300, F453100, F453900, F461100, F461200, F461300, F461400, F461500, F461900, F462100, F462200, F462300, F462400, F471300opt, F471500opt, F471500pt, F471100, F471200, F471300pt, F471400, F471500pt, F471600, F471700, F471800, F471900, F472100, F472200, F472300, F473100, F473200, F473300, F473900, F479100, F479200, F479300, F479900, F479400, F479500, F479600
			G511010, G511020, G512100, G512200, G512300, G512400, G512600, G512900, G512510, G512520, G512530, G512540, G512590, G521000, G523100, G523200, G523300, G523400, G523500, G524100, G524200, G524300, G524400, G524500, G522100, G522300, G522200, G525100, G526100, G526900, G525200, G525300, G525400, G525500, G525900, G531100, G531200, G531300, G532100, G532200, G532300, G532400, G532900
			H571010, H571020, H571030, H571040, H571050, H571090
			H572000, H574000, H573000
Retail trade	31	Retail trade	76
Accommodation, restaurants	32	Accommodation	77
		Bars, clubs, cafes and restaurants	78

Continued

Table 11.C.A2 Industry Mapping in the Inter-industry Study 1996 (Contd)

49 Industry Tables		126 Industry Tables	
Industry Grouping	Row/Column Reference Number	Industry Grouping	Row/Column Reference Number
Road transport	33	Road Freight transport	I611000
Water and rail transport	34	Road passenger transport	I612100 I612200, I612300, I661100, I661900
Air transport, services to transport and storage	35	Water and rail transport	I620000, I630100, I630200, I630300, I662100, I662200, I662300, I662900
Communication services	36	Air transport, services to transport and storage	I640100, I640200, I640300, I663000, I664100, I664200, I664300, I664400, I664900, I650100, I650900, I670100, I670900
Finance	37	Communication services	J711100, J711200, J712000
Insurance	38	Finance	K731000, K732100, K732200, K732300, K732400, K732900, K733000, K734000
Services to finance and investment	39	Life insurance	K741100
Real estate	40	Superannuation fund operation	K741200
Ownership of owner-occupied dwellings	41	Health insurance	K742100
Equipment hire and investors in other property	42	General insurance	K742200
Business services	43	Services to finance and insurance	K751100, K751900, K752000
		Residential property operators	L771110, L771190pt
		Commercial property operators	L771210, L771290
		Real estate agents	L772000
		Ownership of owner-occupied dwellings	L771190pt
		Investors in other property	L773010, L773090
		Vehicle and equipment hire	L774100, L774200, L774300
		Scientific research	L781000
		Technical services	L782100, L782200, L782300, L782900
		Computer services	L783100, L783200, L783300, L783400

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Table 11.C.A2 Industry Mapping in the Inter-industry Study 1996 (Contd)

Industry Grouping	49 Industry Tables		126 Industry Tables		ANZSIC
	Row/Column Reference Number	Industry Grouping	Row/Column Reference Number	Industry Grouping	
Business services (Contd)	43	Legal services	99	L784100	
		Accounting services	100	L784200	
		Advertising and marketing services	101	L785100, L785200, L785300	
Central government administration, defense, public order and safety services	44	Business administrative and management services	102	L785400, L785500	
		Other business services	105		
		Central government administration	106	M811100, M813000	
Local government administration services and civil defense	45	Defense	107	M820000	
		Public order and safety services	108	M812000, Q963100, Q963200, Q963300	
Education	46	Local government administration services and civil defense	109	M811300	
		Pre-school education	110	N841000	
		Primary and secondary education	111	N842100, N842300, N842400, N842200	
Health and community services	47	Post school education	112	N843100, N843200	
		Other education	113	N844000	
		Hospitals and nursing homes	114	O861100, O861200, O861300	
		Medical, dental and other health services	115	O862100, O862200, O862300, O863100, O863200, O863300, O863500, O863600, O863900	
		Veterinary services	116	O864000	
		Child care services	117	O871000	
	Accommodation for the aged	118	O872100		
	Other community care services	119	O872200, O872900		

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Table 11.C.A2 Industry Mapping in the Inter-industry Study 1996 (Contd)

49 Industry Tables		126 Industry Tables		
Industry Grouping	Row/Column Reference Number	Industry Grouping	Row/Column Reference Number	ANZSIC
Cultural and recreational services	48	Motion picture, radio and TV services	120	P911100, P911200, P911300, P912100, P912200
		Libraries, museums and the arts	121	P921000, P922000, P923100, P923900, P924100, P924200, P925100, P925200, P925900
		Horse and dog racing	122	P931110, P931120
		Lotteries, casinos and other gambling	123	P932100, P932200, P932900
		Other sport and recreational services	124	P931200, P931900, P933000
Personal and other community services	49	Personal and other community services	125	Q951100, Q951900, Q952100, Q952200, Q952300, Q952400, Q952500, Q952600, Q952900, Q970000, Q961000, Q962100, Q962200, Q962900
		Waste disposal, sewerage and drainage services	126	Q963400, D370200

Table supplied by Statistics New Zealand

Table 11.C.A3 Commodity Mapping in the Inter-industry Study 1996

49 Industry Tables		126 Industry Tables	
Commodity Grouping	Row/Column Reference Number	Commodity Grouping	Row/Column Reference Number
Horticulture and fruit	1	Vegetables	12
		Pip fruit	13.15
		Kiwi fruit	013.18.16
		Other fruit and nuts	013 (excl 013.15, 013.18.16)
		Oil seeds	14
		Plants, flowers, seeds	15
		Raw vegetable materials	19
Sheep	2	Sheep	21.15
Cattle	3	Cattle	021.11, 021.12.01, 021.12.02
Wool	4	Wool	29.12
Grain and other crops	5	Grain and other crops	11
		Beverage and spice crops	12
		Unmanufactured tobacco	016, 018
Raw milk	6	Raw milk	17
Other livestock and animal products	7	Pigs	no corresponding ANZSCC
		Poultry	21.13
		Deer	21.14
		Other livestock	021.16.13
		Other animal products	021.16 excl. 021.16.13
Agriculture services	8	Agriculture services	029 (excl 029.12, 029.13)
Forestry and logging	9	Forestry and logging	881.10, 20, 30
		Natural gums	31
		Standing timber	32
		Other forestry products	no corresponding ANZSCC
		Services to forestry	39
			881.4

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Table 11.C.A3 Commodity Mapping in the Inter-industry Study 1996 (Contd)

49 Industry Tables		126 Industry Tables	
Commodity Grouping	Row/Column Reference Number	Commodity Grouping	Row/Column Reference Number
Dairy products	14	Processed milk and cream	46
		Yoghurt, buttermilk, ice cream	47
Other food	15	Other dairy products	48
		Prepared fish	49
		Prepared vegetables	50
		Fruit juices	51
		Prepared fruit and nuts	52
		Oils and fats	53
		Grain products	54
		Starches	55
		Animal feedings	56
		Bakery products	57
Beverages and tobacco	16	Sugar	58
		Confectionery	59
		Macaroni and noodles	60
		Other food products	61
		Spirits, wines, beer, tobacco	62
		Soft drinks, bottled water	63
		Natural textiles	64
		Cotton textiles	65
		Man-made fibers and textiles	66
		Yarn and thread	67
Textiles	17	Woven fabrics	68
		Other textiles	69
		Carpets	70
		Processed milk and cream	221
		Yoghurt, buttermilk, ice cream	229.13, 14, 18
		Other dairy products	229 excl 13, 14, 18
		Prepared fish	211.32, 212
		Prepared vegetables	213
		Fruit juices	214
		Prepared fruit and nuts	215
Oils and fats	216, 217, 218		
Grain products	231		
Starches	232		
Animal feedings	233		
Bakery products	234		
Sugar	235		
Confectionery	236		
Macaroni and noodles	237		
Other food products	239		
Spirits, wines, beer, tobacco	241, 242, 243, 250		
Soft drinks, bottled water	244		
Natural textiles	261.1		
Cotton textiles	261.9		
Man-made fibers and textiles	262, 355		
Yarn and thread	263, 264		
Woven fabrics	265, 266, 267, 268		
Other textiles	271, 279		
Carpets	272		

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Table 11.C.A3 Commodity Mapping in the Inter-industry Study 1996 (Contd)

49 Industry Tables		126 Industry Tables	
Commodity Grouping	Row/Column Reference Number	Commodity Grouping	Row/Column Reference Number
Rubber, plastic and other chemical products (Contd)	24	Pharmaceutical products	95
		Soap and perfumes	96
Non metallic mineral products	25	Fertilizers	346.11-346.18
		Pesticides	346.21
		Glass and glass products	371, 373
		Cement, lime and plaster	374
		Articles of concrete and stone	375, 376
		Other mineral products	379
Basic metals	26	Metal wastes	393
		Iron and steel	411
		Other metals	413, 414, 415, 416
Structural, sheet and fabricated metal products	27	Structural metal products	412, 421
		Tanks, reservoirs and containers	422
		Steam generators	423
		Other fabricated metal products	429
Motor vehicles and other transport equipment	28	Engines	431.11, 431.12, 431.13, 431.14, 431.90
		Motor vehicles and parts	491
		Coach work	492
		Ships	493
		Pleasure and sporting boats	494
		Other transport equipment	495, 499
		Aircraft and parts	496
Industrial machinery	29	General industrial machinery	432, 433, 434, 435, 439, 442, 443
		Machinery for textile production	446
		Agricultural and forestry equipment	441

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Table 11.C.A3 Commodity Mapping in the Inter-industry Study 1996 (Contd)

49 Industry Tables		126 Industry Tables	
Commodity Grouping	Row/Column Reference Number	Commodity Grouping	Row/Column Reference Number
Industrial machinery (Contd)	29	Machinery for mining	120
		Machinery for food production	444
		Domestic appliances	121
		Office equipment	445
		Computers and parts	122
		Electric equipment	448
			449, 451
			452
			461, 462, 463, 464, 465, 469, 471, 472, 473, 474
			475
			484
			481
Photographic and scientific equipment	31	Audio and video records and tapes	126
		Watches and clocks	127
		Medical equipment	128
		Photographic and scientific equipment	129
			482, 483
Furniture	32	Furniture	130
Other manufactures	33	Jewelry	131
		Musical instruments	132
		Sports goods	133
		Games and toys	134
		Prefabricated buildings	385, 386
		Other manufactured articles	387
		Services incidental to manufacturing	135
		Electricity	136
		Services incidental to electricity distribution	137
		Water	389, 447
			884, 885
Services incidental to manufacturing	34		
Electricity	35		
			171
			887.00pt
Water supply	36		
			173, 180

Continued

Table 11.C.A3 Commodity Mapping in the Inter-industry Study 1996 (Contd)

49 Industry Tables		126 Industry Tables	
Commodity Grouping	Row/Column Reference Number	Commodity Grouping	Row/Column Reference Number
Construction	37	Pre-erection work	141
		Residential building construction	142
		Non-residential building construction	143
		Civil engineering	144
		Prefabricated constructions	145
		Other installation work	146
		Plumbing	147
		Electrical installation work	148
		Fencing	149
		Building completion work	150
		Land and land improvements	151
Wholesale trade	38	Wholesale trade	152
Retail trade	39	Retail trade	153
Repair services to machinery and equipment	40	Repair services to machinery and equipment	154
Accommodation, restaurant and bar services	41	Accommodation	155
		Meal services	156
		Takeaways	157
		Beverage services	158
Road transport services	42	Road passenger transport	159
		Road freight transport	160
		Supporting services for road transport	161
Water and rail transport services	43	Sea, water and rail services	162

Continued

Table 11.C.A3 Commodity Mapping in the Inter-industry Study 1996 (Contd)

49 Industry Tables		126 Industry Tables	
Commodity Grouping	Row/Column Reference Number	Commodity Grouping	Row/Column Reference Number
Air transport, other transport and storage services	44	Air transport, other transport and storage services	163
Communication services	45	Communication services	164
Finance services	46	Finance	165
Insurance services	47	Life insurance	166
		Superannuation services	167
		Health insurance	168
		General insurance	169
Services to finance and insurance	48	Services to finance and insurance	170
Real estate services	49	Leased commercial property services	171
		Leased residential property services	172
		Other real estate services	173
Owner-occupied dwellings	50	Owner-occupied dwellings	174
Equipment hire services	51	Equipment hire	175
Computer services	52	Computer software and services	176
		Legal services	177
Legal and accounting services	53	Accounting services	178
		Taxation services	179
Architectural and engineering services	54	Architectural and engineering services	180
Advertising and marketing services	55	Advertising and marketing	181
Management consultancy services	56	Management consultancy	182
Other business services	57	Research and development	183
		Placement and supply of personnel	184
		Investigation and security services	185

Continued

Table 11.C.A3 Commodity Mapping in the Inter-industry Study 1996 (Contd)

49 Industry Tables		126 Industry Tables	
Commodity Grouping	Row/Column Reference Number	Commodity Grouping	Row/Column Reference Number
Other business services (Contd)	57	Cleaning	186
		Photographic services	187
		Other business services	188
Central government administration and defense	58	Central government administration services	189
		Public order, safety and defense	190
Local government administration	59	Local government administration services	191
Education	60	Preschool education	192
		Primary education	193
		Secondary education	194
		Higher education	195
		Other education services	196
Health and community services	61	Hospital and nursing care	197
		Medical, dental and other health services	198
		Vet services	199
		Accommodation for the aged	200
		Other social services	201
		Child care services	202
Culture and recreational services	62	Motion picture, radio, TV services	203
		News agency services	204
		Libraries, museums, art	205
		Sport and recreation services	206
Personal and other community services	63	Other personal and other community services	207

Continued

Table 11.C.A3 Commodity Mapping in the Inter-industry Study 1996 (Contd)

49 Industry Tables		126 Industry Tables		ANZSCC
Commodity Grouping	Row/Column Reference Number	Commodity Grouping	Row/Column Reference Number	
Personal and other community services (Contd)	63	Sewerage services	208	940.1
Direct purchases abroad by residents	64	Waste disposal	209	940.20, 30
		Direct purchases abroad by residents	210	no corresponding ANZSCC

Table supplied by Statistics New Zealand