

14.16

Vietnam

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14.16.1 Sources of input-output data base for Vietnam

The purpose of this section is to document the sources and procedures adopted in preparing the input-output (I/O) data base for Vietnam in the GTAP version 4 data base. The original Vietnamese I/O data base was obtained from a single country CGE model of the Vietnamese economy - *VN-GEM: A CGE model of the Vietnamese economy* - developed by the Centre for Vietnamese Studies of the University of New South Wales and Centre of Policy Studies of Monash University (see, Truong, *et al*, 1995). The 55 sector I/O data base for the year 1989 published by the General Statistical Office (1992) has been the basis for this data base.

14.16.2 Conversion of the Vietnamese input-output data for GTAP

The I/O data base of the VN-GEM model was available in a header array file which included domestic and imported intermediate commodity flows, capital flows, trade and transport margins and different taxes. Several steps were taken to incorporate this data base into the version 4 of the GTAP data base.

Firstly, we rearranged the original header array file of the VN-GEM model according to the GTAP data format (with GTAP headers). In this process detailed matrices of trade and transport margins and taxes were adjusted to the relevant commodity flows. Matrices of commodity flows (domestic and imported) into capital creation were also aggregated into column vectors to be consistent with the GTAP I/O data format.

Secondly, the modified 55 sector I/O data base was mapped into the GTAP classification as shown in table 14.16.1. This table shows that while some of the industries were required to be aggregated, others were required to be disaggregated to be consistent with the GTAP I/O format. The aggregation was easier. The disaggregation of the agriculture sector (sector 37) and animal farming (sector 38) was a main task. Apart from these two sectors, a few other sectors also needed disaggregation (see chapter 16 for details on the disaggregation procedure performed on submitted I/O tables which have less than 50 GTAP sectors).

References

- General Statistical Office. 1992. *System of National Accounts of Vietnam 1986-1990*, Statistical Publishing House, Hanoi.
- Truong, T.P., Parmenter, B.R. and J.M. Horridge. 1995. "VN-GEM: A General Equilibrium Model of the Vietnamese Economy", a draft paper, Centre for Vietnamese Studies (University of New South Wales) and Centre of Policy Studies and Impact Project (Monash University), Australia.

Table 14.16.1 GTAP-Vietnamese I/O concordance

GTAP sectors		Vietnam I/O sectors
Code	Description	
pdr	Paddy rice	37. Agriculture,
wht	Wheat	37. Agriculture
gro	Cereal grainss n.e.c.	37. Agriculture
v_f	Vegetables, fruit, nuts	37. Agriculture
osd	Oil seeds	37. Agriculture
c_b	Sugar cane, sugar beet	25. Sugar
pfb	Plant-based fibers	37. Agriculture
ocr	Crops n.e.c	37. Agriculture
ctl	Bovine cattle, sheep & goats, horses	38. Animal husbandry
oap	Animal products n.e.c	38. Animal husbandry
rmk	Raw milk	38. Animal husbandry
wol	Wool silk-worm cocoons	38. Animal husbandry
for	Forestry	39. Forestry
fsh	Fishing	24. Fishing
col	Coal	2. Coal
oil	Oil	4. Other mining
gas	Gas	4. Other mining
omn	Minerals n.e.c	3. Minerals
cmt	Bovine cattle, sheep & goat, horse meat products	38. Animal husbandry
omt	Meat products n.e.c	38. Animal husbandry
vol	Vegetable oils and fats	37. Agriculture
mil	Dairy products	38. Animal husbandry
pcr	Processed rice	23. Grain milling
sgr	Sugar	25. Sugar

(Cont)

Table 14.16.1 GTAP-Vietnamese I/O concordance

GTAP sectors		Vietnam I/O sectors
Code	Description	
ofd	Food products nec	26. Vegescanning 27. Tea and coffee products 29. Aquatic products 31. Other food products
b_t	Beverages and Tobacco products	28. Tobacco 30. Beverages
tex	Textiles	32. Textiles 33. Carpets
wap	Wearing apparel	32. Textiles
lea	Leather products	34. Footwear
lum	Wood products	20. Wood products
ppp	Paper products, publishing	21. Paper products
p_c	Petroleum, coal products	55. Petroleum and gas
crp	Chemical, rubber, plastic products	10. Chemical 11. Fertilizer 12. Rubber products 13. Soaps 14. Pharmaceuticals 15. Plastic products 16. Other chemicals
nmm	Mineral products n.e.c.	17. Cement 18. Bricks 19. Other building materials
i_s	Ferrous metals	5. Ferrous metals
nfm	Metals n.e.c.	6. Non-ferrous metals
fmp	Metal products	6. Non-ferrous metals
mvh	Motor vehicles and parts	9. Other metal products (motor vehicles)
otn	Transport equipment n.e.c.	9. Other metal products
ele	Electronic equipment	8. Electrical products
ome	Machinery and equipment n.e.c.	7. Machinery & equipment n.e.c.
omf	Manufactures n.e.c.	36. Other industries
ely	Electricity	1. Electricity

Table 14.16.1 GTAP-Vietnamese I/O concordance

GTAP sectors		Vietnam I/O sectors
Code	Description	
gdt	Gas manufacture, distribution	55. Petroleum & gas
wtr	Water	35. Water
cns	Construction	40. Construction
t_t	Trade, transport	41. Freight transport 42. Passenger transport 43. Communication 44. Trade 45. Restaurant 46. Material supply 47. Other materials
osp	Financial, business, recreational services	48. Finance 53. Repairs
osg	Public admin and defense, education, health	49. Public administration etc. 50. Science 51. Health and education 54. Other non-profit organization
dwe	Dwellings	54. Dwelling services