

Ecuador

Sara Wong and Carlos Ludena*

1. Introduction

This document describes the steps behind the creation of the first Ecuadorian Input-Output (IO) table for the Global Trade Analysis Project (GTAP). The GTAP Input-Output table for Ecuador is based on the 2001 Supply and Use matrices compiled by the Central Bank of Ecuador. The Central Bank of Ecuador is the only official provider of these data in Ecuador, and is in charge of collecting and processing data on National Accounts.

This document is divided in 4 sections. The next section explains the data, their particular characteristics and its salient economic features. Section 3 describes the process of building the database, outlining some of the assumptions made about the structure of the source data so it can be consistent with GTAP specifications. Section 4 describes briefly the sectoral aggregation and splits. Finally, section 5 describes source data missed in the process of moving to the GTAP specification.

2. Source Data

2.1 Characteristics

The 2001 Supply and Use tables of Ecuador have a commodity by industry format. The units are in thousands of US Dollars in current prices, and include 60 commodities and 47 industries¹. Appendix 1A provides a list of commodities with descriptions and concordances between the Ecuador IO commodity classification and the SIC rev.3 (ISICr3). Similarly, Appendix 1B provides the concordance between the Ecuador IO commodity data and GTAP sector classification (GSC2).

The Use matrix includes an additional industry (48 in total) called Intermediate Financial Services Indirectly Estimated (“SIFMI” by its acronym in Spanish). This is a fictitious industry included in the source data to treat the value generated by financial intermediation. As explained in Córdova and Oleas (2000) the SIFMI is “...a fictitious industry created to treat the value generated by financial intermediation. In the use matrix, the production of this sector corresponds to the intermediate consumption of a fictitious sector with negative value added and intermediate consumption with the same value but opposite sign to value added.” [Our translation]. Section 3.3 below explains how this sector was treated to match the GTAP sectoral classification.

* Sara Wong acknowledges financial support from ESPOL (Ecuador).

¹ Ecuador adopted the US Dollar as her currency in 2000. At that time, the Ecuadorian currency –called sucre, was exchanged at a fixed exchange rate of 25,000 sucres per dollar.

2.2 Main Economic Features

In Ecuador, the Central Bank constructs Supply and Use matrices. This institution is in charge of preparing the Ecuadorian system of National Accounts. Supply and Use tables are part or sub-product of this system. The Central Bank of Ecuador not only follows the United Nations methodology on national accounts but also makes an effort to suit Supply and Use tables to the reality of the productive system of Ecuador.

The Use table in Ecuador can be seen as one matrix with four sub-matrices:

- I. Total supply of goods and services available in a year, which includes domestic production and imports, plus taxes, tariffs, and margins –added all together by commodity in one column. That is, the total supply column vector is measured at purchasers’ prices.
- II. Intermediate demand sub-matrix, representing industry’s consumptions by commodity, valued at purchasers’ prices.
- III. Final demand or final utilization sub-matrix, which represents consumption of households, consumption of government, gross fixed capital formation, changes in stock, and exports –by commodity. Final demand is valued at purchasers’ prices.
- IV. Output sub-matrix, a matrix that registers gross production by industry, value added generated by these industries and the primary decomposition of value added (capital, labor remuneration, plus net indirect taxes on both output and imports).

There is a complementary table to the Use matrix available from the Central Bank of Ecuador: the Supply or Make matrix. This is a matrix of 60 commodities and 47 industries that describes the origin of domestic supply of goods and services.

There are some particular features of the Supply and Use tables of Ecuador. These features deal with a fictitious industry (SIFMI), direct purchases of goods and services, and accounting treatments in the oil industry.

As mentioned before, the Use table of Ecuador presents a fictitious industry (SIFMI). The Central Bank of Ecuador avoids the difficult task of dealing with distributing financial services production into intermediate industry’s consumption by creating a fictitious industry that “consumes” all imputed financial services production. Production of this fictitious industry is zero, and –given that the fictitious industry has intermediate consumption– its value added is negative.

The Use table also includes data for “direct purchases of other goods and services.” By including these data the Central Bank tries to distinguish “final consumption in the domestic territory” from “national consumption.” Direct purchases register then, purchases that Ecuadorian nationals make from foreign sources and purchases that non-residents make in Ecuador.

The Central Bank of Ecuador points out that by including data on direct purchases it is possible to “...calculate final consumption of household residents (national consumption); measure in a best way the input, in intermediate goods, of Public Administration; and, calculate gross savings of residents.” [Our translation]. See “Metodología de Cuentas Nacionales del Ecuador”, 1983, p. 96.

Finally, another salient feature of the Supply and Use tables of Ecuador is the accounting treatment in the refinery industry: oil input is valued at the average prices of direct exports of oil (that is, at international prices) while production of refinery is valued at domestic prices. According to the Central Bank of Ecuador, an advantage of this accounting treatment is that it does not create distortions in the contribution and weights of the trade industry in the economy of

Ecuador. The disadvantage of it is that it makes it difficult to interpret the negative value added shown by the refinery industry. Given that oil (the intermediate consumption of refinery) has its prices expressed in international prices –but the production of refinery is set in (government fixed) domestic prices– it is usually the case that the value of production in refinery is lower than the value of its intermediate consumption. Therefore, refinery’s valued added is negative.

3. Preparing the Ecuadorian Data Base

3.1 Make Matrix

Because the GTAP model and its database are commodity by commodity, the multi-product (commodity by industry) Supply or Make table of Ecuador had to be converted to a single-product (commodity by commodity) database. We expanded the Make table from commodity by industry (60x47) to commodity by commodity (60x60), by moving values of a commodity j across industries i to industry j , to produce a diagonal matrix. For example, tables 2 and 3 denote the make matrix before and after diagonalization. The commodity “Other Agricultural Products” is produced in two industries, “Livestock” and “Other Crops”. The diagonalization eliminates the multi-product nature of the make matrix, moving what is produced of “Other Agricultural Products” in industry “Livestock” into a sector “Other Agricultural”.

This means that if we started with a Livestock industry that produced “Other Agricultural” commodities as well as “Cattle and others” commodities we ended up with a sector “Cattle and Others (livestock)” that produced only cattle and a sector “Other Agricultural Products” that produced only other agricultural products.

To end up with a diagonal make matrix, we applied commodity shares of total output within the same industry j in the make matrix to distribute values by commodity from industry i to industry j in this matrix. We aggregated the product of each of the various industries which produce the same commodity to yield a sector that produces a single commodity.

Table 1. Selected Production of Commodity i by Industry j - Original Make Matrix
– In Thousands of US Dollars

		...	3	4	5	...	47
Commodity	Industry		Flower Crops	Other Crops	Livestock		Total 3+4+5
⋮							
3	Flowers		303,587	0	0		303,587
4	Other Agricultural Products		0	361,136	149,243		510,379
5	Cattle and others		0	0	893,224		893,224
⋮							
60							
	Total 3+4+5		303,587	361,136	1,042,467		1,707,190

Table 2. Selected Production of Commodity *i* by Commodity *j* - Diagonal Make Matrix
– In Thousands of US Dollars

		...	3	4	5	...	60
Commodity	Commodity		Flowers	Other Agricultural (Other Crops)	Cattle and others (livestock)		Total 3+4+5
⋮							
3	Flowers		303,587	0	0		303,587
4	Other Agricultural Products		0	510,379	0		510,379
5	Cattle and others		0	0	893,224		893,224
⋮							
60							
	Total 3+4+5		303,587	510,379	893,224		1,707,190

3.2 Value Added

An initial step was to add the vector called Direct Purchases or “Compras Directas” in Intermediate Consumption to value added (see section 2.2 for an explanation of this account). This was necessary, since “Compras Directas” affected the balance between sales and costs. The only sector affected by this procedure was Public Administration (“Administración Pública y Defensa, planes de Seguridad Social de afiliación obligatoria”). All other sectors had zero values in the vector of Direct Purchases. We allocated the value of \$39,454 (in thousands of US Dollars) corresponding to “Compras Directas” in Public Administration into the value added of this sector.

Refinery presented negative value added due to the accounting treatment of input and output prices in the source data (see section 2.2 above). For this sector, we put a subsidy (negative indirect tax) and add the same value -but positive- to capital, so that capital represents a “normal” rate of return.

The value added in the source data accounted for labor and capital (wages and salaries, income from owner-operator, and capital income), and net indirect taxes. We assigned value added amongst different factors of production in the source data according to the shares in Table 3 to do both, account for land and distribute income from owner-operator to labor, land, and capital. We apply these shares differently, depending on whether the industry use or not natural resources.

For manufacturing and service –sectors for which we assumed no use of natural resources– the process of obtaining factors of production categories consisted of adding to labor (wages and salaries) and capital the assumed fraction of owner-operators’ income imputed to labor and capital, respectively. By definition, value added for land was set to zero in these sectors.

For those sectors that used natural resources such as primary agriculture, forestry, fish, oil, and mining, we followed the same procedure as in the sectors discussed before, except that the fraction assigned to land was positive.

Table 3. Shares of Factor Endowment in Value Added

Description	Factor Share ¹
Non-agricultural owner-operator income given to labor	0.6
Non-agricultural owner-operator income given to capital	0.4
Agricultural owner-operator income given to labor	0.6
Agricultural owner-operator income given to land	0.2
Agricultural owner-operator income given to capital	0.2
Gross fixed capital formation given to land	0.3
Gross fixed capital formation given to capital	0.7

¹. Source: Mark Horridge, Center of Policy Studies, Monash University. S. Wong thanks Mark Horridge for numerous insightful observations and advice throughout the course of the work on Ecuador data at Monash.

To distribute ownership of Dwellings, we applied the following shares across factors: a) 10% to labor, b) 10% to Land, and c) 80% to Capital.

Finally, we expanded value added from industries to commodities using the cost shares of the make matrix, to maintain the same cost structure in the new expanded sectors.

3.3 Use Matrix (UP)

We made the following three corrections to the source Use matrix to meet GTAP specifications:

1. As explained in section 2.1, the Use matrix included a fictitious industry called Intermediate Financial Services Indirectly Estimated (SIFMI). In the Use table, this industry consumed only a Financial Intermediation commodity. We removed the fictitious sector from intermediate consumption of the Use table and assigned this value to households' final demands. In other words, the cell in the Use matrix that corresponded to the Financial Intermediation commodity and the SIFMI was set to zero, and the amount of that cell was placed into final demand of Households for Financial Intermediation.
2. We transformed the Use matrix from a commodity-by-industry to a commodity-by-commodity matrix. To perform this change, we applied commodity shares of total output within the same industry j in the Make table to distribute values by commodity from industry i to industry j in the Use matrix. We aggregated each of the various industries which consumed a given commodity x to yield the intermediate use of that commodity x , each of the various industries which consumed another given commodity y to yield the intermediate use of that commodity y , and so on. These new sectors have a cost structure that is a share-weighted sum of the cost structure of the parent industries that produce these commodities (in the Make matrix).
3. We included the values of the column vector called "Márgenes Comerciales" of the Make matrix into the commodity "Comercio" of the modified commodity-by-commodity Use matrix. This vector has a negative value in 'Comercio' equal to sum of all the other commodities. This negative value was set to zero as we included these values into the Use matrix. This adjustment captured margins across commodities and allowed to maintain the balance between sales and costs.

To separate the Use matrix into Domestic and Imports Use, we used a vector of imports to distribute and extract import use by commodity. The source data contained total imports by commodity, classified in three categories: a) Imports of goods (CIF), b) Imports of Services, and c) a CIF-FOB Adjustment. The import data used included the sum of these three categories, plus tariffs and net taxes on imports. The resulting vector of imports was multiplied by row shares of each commodity i in industry j , to estimate and extract imports use.

The GTAP specification does not allow re-exports, so we distributed all exports to the Domestic Use matrix, allocating zeros into these columns in the Import Use matrix. This procedure produced both domestic and import tables commodity tax inclusive (matrix “UP” in GTAP notation).

3.4 Domestic and Import Use Free of Taxes (UF)

Both domestic and import Use matrices included sales taxes. To produce tax-free matrices (“UF” in GTAP notation), we obtained the amount of valued added tax corresponding to both imports and domestic (intermediate and final) demands (except from “Change in Stocks” and “Exports”) and subtracted these taxes from the corresponding demands. We subtracted net import taxes by commodity from household final consumption of imports, since it was considered that net import taxes were applied only to household consumption. This procedure produced both domestic and import use tables, commodity tax excluded.

3.5 Output (OP) and Imports Free of Tariffs (MF)

To obtain a vector of output of sector i non-commodity net indirect tax included (vector “OP” in GTAP notation), we added net indirect taxes on production to the sum of domestic intermediate use, imports intermediate use, and value added. Net indirect taxes resulted from adding two categories of the source data: a) Indirect Taxes on Production, and b) Production Subsidies.

Finally, to produce a vector of imports by commodities with import duties excluded (vector “MF” in GTAP notation) we removed tariffs from the totals of free-of-consumption-tax Imports Use table.

4. Commodity Aggregation and Splits

According to the sectoral concordance between GSC2 sectors and the Ecuador IO table (Appendix 1B) we aggregated the 60 sectors from Ecuador into 40 sectors, assuring balance was maintained. For example, “Shrimp” and “Live, fresh and frozen Fish” were aggregated to the GSC2 sector “Fishing”.

We performed an initial sectoral split for the agricultural sectors, using commodity shares. This split was necessary, because some Ecuador’s sectors that were aggregated together, did not match the mapping to the GTAP sectors. For example, coffee and cacao, which belong to GSC2 8, were mapped to GSC2 4, since they were included with bananas. Or the case where fruits and vegetables were included in “Other Agricultural Products”, and were mapped to GSC2 5, 6 and 7, instead of GSC2 4. The commodity shares were calculated using FAO commodity balances and 1990 international prices (FAO, 1996). The shares used for this split are in Appendix 3.

The only split that we performed was of “Textiles and Apparel” into the two corresponding GTAP sectors (tex and wap). We used an average from shares of Intermediate Use at consumer prices from Bolivia, Chile, Colombia, and Peru IO tables. The average shares used were 47.8% (tex) and 52.2% (wap). We use these shares to split Textiles and Apparel across commodities and industries in intermediate use, final demand (UP and UF), output (OP) and imports (MF). The rest of the sectoral split to map the Ecuadorian sectors in the aggregated IO to the 57 GSC2 sectors was performed at the GTAP Center, using the cost structure of their “GTAP Representative Table” (chapters 13 and 14, Dimaranan and McDougall, 2002).

5. Final Comments

The only data lost as a result of moving between the source data and the GTAP format were the data of direct purchases in both: final demand (Household Consumption and Exports) and imports (of services). The negative value added in SIFMI was also excluded. Appendix 2 provides a summary diagram of the procedures applied to the source data to bring it into the GTAP format.

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APPENDIX 1A. Commodity classification and Concordance between Ecuador IO Table and ISICr3

No.	Commodity No.	Description	ISICr3
1	01.01	Bananas, Coffee, Cocoa	0112-0113
2	02.01	Cereals	0111
3	03.01	Flowers	0112
4	04.01	Other Agricultural Products	0111, 0112, 0113
5	05.01	Livestock and Animal Production	0121-1511; 0122
6	06.01	Forestry	0111-0200
7	07.01	Shrimp	0500
8	08.01	Live, fresh and frozen Fish	0500
9	09.01	Oil and Natural Gas	1110
10	10.01	Metallic Mineral	1310, 1320
11	10.09	Non-Metallic Mineral	1410-1429; 1010-1020-1030-1410, 1421-1422-1429
12	11.01	Electricity	4010
13	11.09	Gas and Water	4020, 4100
14	12.01	Meat Products	1511-1711
15	13.01	Processed Shrimp	1512
16	14.01	Processed Fish	1512
17	14.09	Canned Fish	1512
18	15.01	Oils and Fats	1514-1532
19	16.01	Dairy Products	1520
20	17.01	Mills Products	1531
21	17.09	Bakery and Pasta Products	1531-1541, 1544
22	18.01	Sugar	1542
23	19.01	Processed Cocoa	1543
24	19.09	Chocolate and Candy	1543
25	20.01	Other Food Products	1513-1549, 1532, 1533
26	20.09	Processed Coffee	1549
27	21.01	Alcoholic Beverages	1551-1552, 1553
28	21.09	Non-Alcoholic Beverages	1554
29	22.01	Tobacco Products	1600
30	23.01	Textiles and Apparel	1711-1730, 1721-1722-1723-1729, 1730-1810-1820-2520
31	23.09	Leather Products	1911-1912, 1920
32	24.01	Wood Products	2010, 2021, 2022, 2023, 2029
33	25.01	Paper Products	2101, 2102-2109, 2211-2212-2219-2221-2222-7421
34	26.01	Petroleum Products	2320, 2310
35	27.01	Chemical Products	2411-2424-2429
36	27.09	Other Chemical Products	2412-2421; 2423, 2424; 2422-2429; 2430; 2330-4010; 2413-2429
37	28.01	Rubber Products	2511; 2519
38	28.09	Plastic Products	2520
39	29.01	Non-Metallic Mineral Products	2610; 2691; 2692-2693
40	29.09	Other Non-Metallic Mineral Products	2694-2695, 2696; 2699

APPENDIX 1A. Commodity classification and Concordance between Ecuador IO Table and ISICr3 (Continued)

No.	Commodity No.	Description	ISICr3
41	30.01	Metals	2710, 2720
42	30.09	Metal Products	2811-2812-2813; 2893-2899
43	31.01	Machinery, Equipment and Electric Products	2911-2912-2913-2914-2915-2919-3410-3430-3530; 2899-2915-2921-2922-2923-2924-2925-2926-2927-2929-2930; 3000; 3110-3120-3130-3140-3150-3190; 2213-2429-3210-3220-3230; 3311; 2429-3311-3312-3320; 3330
44	32.01	Transport Equipment	3410-3420-3430; 3511-3512-3520-3530; 3591-3592
45	33.01	Other Manufactured Products	3610; 2811; 0500-3691-3692-3693-3694-3699-7494-9211-9214-9302
46	34.01	Construction	4510-4520-4530-4540-4550
47	35.01	Trade	5110-5121-5122-5131-5139-5142-5143-5149-5150-5220-5231-5232-5233-5234-5239
48	36.01	Hotels and Restaurants	5510, 5520
49	37.01	Transport and Storage	6021-6022-6023; 6010-6021; 6030; 6110, 6120; 6210-6220; 62; 6210-6220; 6301, 6302-6303-6309; 6304
50	38.01	Mail Services	6411-6412
51	38.09	Telecommunications	6420
52	39.01	Financial Intermediation	6511; 6519; 6591-6592-6599; 6711-6712-6719
53	40.01	Insurance and Pension Funds	6601; 6603; 6720
54	41.01	Dwellings	7010
55	42.01	Business Services	7010-7020; 7111-7112-7113-7121-7122-7123-7129-7130; 7210-7220-7230-7240-7250-7290; 7310-7320-73; 7411, 7412-7414; 7413; 7421-7422; 7430; 7491, 7492, 7493, 7494, 7495-7499; 0140-0150-0200-0500; 15-16-17-18-19-20-21-22-24-25-26-361-369-37-27-28-29-30-31-32-33; 7421-7422-1120-23; 5050-5040-5260-28-29-30-31-32-33-34-35-40
56	43.01	Government Services	7511-7512-7513-7514-7521-7522-7523; 7530
57	44.01	Education	8010-8021-8022; 8030; 8090
58	45.01	Social and Health Services	8511-8512-8519-8520; 8531-8532
59	46.01	Other Social and Personal Services	9000; 9111-9112-9120-9191-9192-9199; 9211-9212-9213-9214-9219-9220-9231-9241-9249; 9301-9302-9303-9309
60	47.01	Domestic Services	9500

Source: Córdova, G., and J. Oleas, 2000. *Las Clasificaciones de Industrias y de Productos del Sistema de Cuentas Nacionales 1993 Aplicadas a la Economía Ecuatoriana*. Central Bank of Ecuador, Technical Paper No. 126. October 2000, Appendix 4, pp. 35-49.

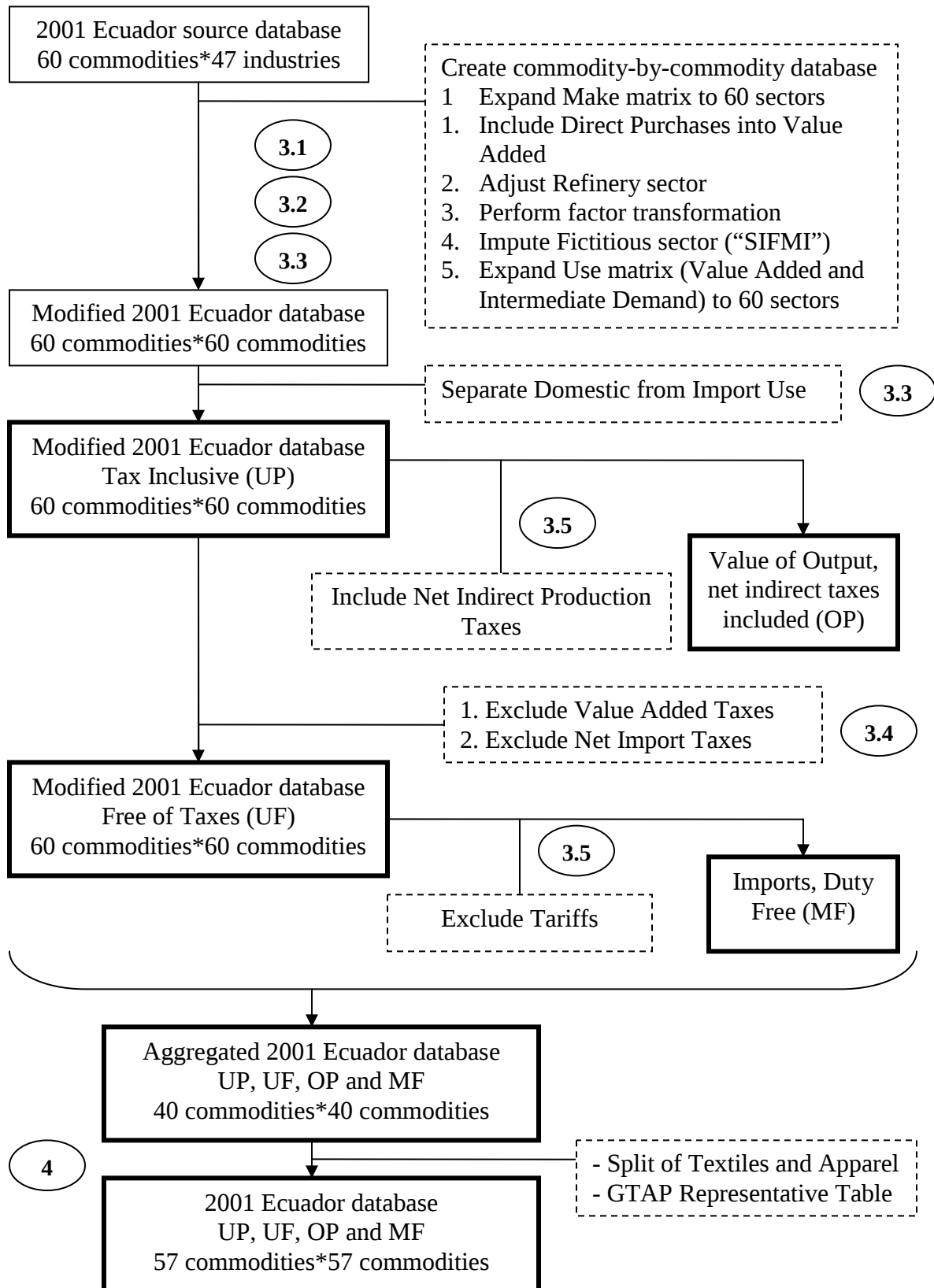
APPENDIX 1B. Concordance between GSC2 Sectors and Ecuador IO table

GSC2 No.	GSC2 Code	GSC2 Description	Ecuador Commodity Name	Ecuador Commodity No.
1	pdr	Paddy rice	Cereals	02.01
2	wht	Wheat	Cereals	02.01
3	gro	Cereal grains nec	Cereals	02.01
4	v_f	Vegetables, fruit, nuts	Bananas, Coffee, Cocoa	01.01
5	osd	Oil seeds	Other Agricultural Products	04.01
6	c_b	Sugar cane, sugar beet	Other Agricultural Products	04.01
7	pfb	Plant-based fibers	Other Agricultural Products	04.01
8	ocr	Crops nec	Flowers	03.01
9	ctl	Cattle, sheep, goats, horses	Livestock and Animal Production	05.01
10	oap	Animal products nec	Livestock and Animal Production	05.01
11	rmk	Raw milk	Livestock and Animal Production	05.01
12	wol	Wool, silk-worm cocoons	Livestock and Animal Production	05.01
13	for	Forestry	Forestry	06.01
14	fsh	Fishing	Shrimp	07.01
			Live, fresh and frozen Fish	08.01
15	col	Coal	Oil and Natural Gas	09.01
16	oil	Oil	Oil and Natural Gas	09.01
17	gas	Gas	Oil and Natural Gas	09.01
18	omn	Minerals nec	Metallic Mineral	10.01
			Non-Metallic Mineral	10.09
19	cmt	Meat: cattle, sheep, goats, horse	Meat Products	12.01
20	omt	Meat products nec	Meat Products	12.01
21	vol	Vegetable oils and fats	Oils and Fats	15.01
22	mil	Dairy products	Dairy Products	16.01
23	pcr	Processed rice	Mills Products	17.01
24	sgr	Sugar	Sugar	18.01
25	ofd	Food products nec	Processed Shrimp	13.01
			Processed Fish	14.01
			Canned Fish	14.09
			Bakery and Pasta Products	17.09
			Processed Cocoa	19.01
			Chocolate and Candy	19.09
			Other Food Products	20.01
			Processed Coffee	20.09
26	b_t	Beverages and tobacco products	Alcoholic Beverages	21.01
			Non-Alcoholic Beverages	21.09
			Tobacco Products	22.01
27	tex	Textiles	Textiles and Apparel	23.01
28	wap	Wearing apparel	Textiles and Apparel	23.01
29	lea	Leather products	Leather Products	23.09
30	lum	Wood products	Wood Products	24.01
31	ppp	Paper products, publishing	Paper Products	25.01
32	p_c	Petroleum, coal products	Petroleum Products	26.01

APPENDIX 1B. Concordance between GSC2 Sectors and Ecuador IO table (Continued)

GSC2 No.	GSC2 Code	GSC2 Description	Ecuador Commodity Name	Ecuador Commodity No.
33	crp	Chemical, rubber, plastic prods	Chemical Products	27.01
			Other Chemical Products	27.09
			Rubber Products	28.01
			Plastic Products	28.09
34	mmm	Mineral products nec	Non-Metallic Mineral Products	29.01
			Other Non-Metallic Mineral Products	29.09
35	i_s	Ferrous metals	Metals	30.01
36	nfm	Metals nec	Metal Products	30.09
37	fmp	Metal products	Metal Products	30.09
38	mvh	Motor vehicles and parts	Machinery, Equipment and Electric Products	31.01
39	otn	Transport equipment nec	Transport Equipment	32.01
40	ele	Electronic equipment	Machinery, Equipment and Electric Products	31.01
41	ome	Machinery and equipment nec	Machinery, Equipment and Electric Products	31.01
42	omf	Manufactures nec	Other Manufactured Products	33.01
43	ely	Electricity	Electricity	11.01
44	gdt	Gas manufacture, distribution	Gas and Water	11.09
45	wtr	Water	Gas and Water	11.09
46	cns	Construction	Construction	34.01
47	trd	Trade	Trade	35.01
			Hotels and Restaurants	36.01
48	otp	Transport nec	Transport and Storage	37.01
49	wtp	Sea transport	Transport and Storage	37.01
50	atp	Air transport	Transport and Storage	37.01
51	cmn	Communication	Mail Services	38.01
			Telecommunications	38.09
52	ofi	Financial services nec	Financial Intermediation	39.01
53	isr	Insurance	Insurance and Pension Funds	40.01
54	obs	Business services nec	Business Services	42.01
55	ros	Recreation and other services	Other Social and Personal Services	46.01
			Domestic Services	47.01
56	osg	PubAdmin/Defence/Health/Educat	Government Services	43.01
			Education	44.01
			Social and Health Services	45.01
57	dwe	Dwellings	Dwellings	41.01

APPENDIX 2. Process of creating the Ecuadorian database for the GTAP database



APPENDIX 3. Sectoral Mapping for Crops between GSC2 and the Ecuador IO Table

GSC2 Code	GSC2 Description	Ecuador Commodity No	Ecuador Commodity Name	Ecuador IO Mapping ²
v_f	Vegetables, fruit, nuts	01.01	Bananas, Coffee, Cocoa	$1*(1 - 0.229) + 4*0.436$
osd	Oil seeds		Other Agricultural Products	
c_b	Sugar cane, sugar beet	04.01	Other Agricultural Products	$4*(1 - 0.312 - 0.229)$
pfb	Plant-based fibers		Other Agricultural Products	
ocr	Crops nec	03.01	Flowers	$3 + 4*0.312 + 1*0.229$

² “Bananas, Coffee, Cocoa” share of coffee and cocoa was 22.9%. The share of fruits and vegetables, and species and other crops in “Other Agricultural Products” was 43.6% and 31.2%, respectively.