Egypt

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1. Introduction

This technical brief describes how the Egyptian Social accounts were collected, manipulated, and submitted to the GTAP consortium for inclusion. Although the national accounts are far from perfect, the importance of Egypt in the Middle East and Egypt's future in the world economy warranted its inclusion.

The process of converting the disparate data for Egypt into a consistent dataset required the use of Microsoft Excel and the GAMS programming language.

2. Data Sources

The original dataset is numbered from 1 to 32. This numbering scheme was re-labeled using more intuitive 3-letter indicators. So sector #1, Plant based agriculture, was converted to AGR. Sector #2, Animal based agriculture, was converted to LVS, for livestock, and so on. The sector mapping is included in table 1.

Table 1. Mapping between Egyptian and GTAP sectors

Number	Egypt Code	GTAP Code	GTAP Description	Egypt Description
1	AGR	**PDR**	Paddy rice	Agriculture - plant products
2	AGR	**WHT**	Wheat	Agriculture - plant products
3	AGR	**GRO**	Cereal grains nec	Agriculture - plant products
4	AGR	**V_F**	Vegetables, fruit, nuts	Agriculture - plant products
5	AGR	**OSD**	Oil seeds	Agriculture - plant products
6	AGR	**C_B**	Sugar cane, sugar beet	Agriculture - plant products
7	AGR	**PFB**	Plant-based fibers	Agriculture - plant products
8	AGR	**OCR**	Crops nec	Agriculture - plant products
9	LVS	**CTL**	Bovine cattle, sheep and goats, horses	Agriculture - animal products
10	LVS	**OAP**	Animal products nec	Agriculture - animal products
11	LVS	**RMK**	Raw milk	Agriculture - animal products
12	No-Production	**WOL**	Wool, silk-worm cocoons	No-Production
13	No-Production	**FRS**	Forestry	No-Production
14	LVS	**FSH**	Fishing	Agriculture - animal products
15	No-Production	**COA**	Coal	No Production
16	CRU	**OIL**	Oil	crude petroleum

Number	Egypt Code	GTAP Code	GTAP Description	Egypt Description
17	CRU	**GAS**	Gas	crude petroleum
18	MIN	**OMN**	Minerals nec	Mining & Quarries
19	LVS	**CMT**	Bovine meat products	Agriculture - animal products
20	LVS	**OMT**	Meat products nec	Agriculture - animal products
21	LVS	**VOL**	Vegetable oils and fats	Agriculture - animal products
22	LVS	**MIL**	Dairy products	Agriculture - animal products
23	FOD	**PCR**	Processed rice	food industry prod
24	FOD	**SGR**	Sugar	food industry prod
25	FOD	**OFD**	Food products nec	food industry prod
26	B_T	**B_T**	Beverages and tobacco products	(Aggregated Sector: BEV+TBC)
27	TEX	**TEX**	Textiles	Yarn & Fabrics
28	WAP	**WAP**	Wearing apparel	Garments & foot wear
29	LTR	**LEA**	Leather products	leather products
30	WOD	**LUM**	Wood products	wood & wooden furniture
31	PPR	**PPP**	Paper products, publishing	paper & cartons
32	P_C	**P_C**	Petroleum, coal products	(Aggregated Sector: PET+COL)
33	CRP	**CRP**	Chemical, rubber, plastic products	Combined Chemical and Rubber sectors
34	NMM	**NMM**	Mineral products nec	Non metal products
35	MTL	**I_S**	Ferrous metals	Primary metal productsٌ
36	LMF	**NFM**	Metals nec	metal product: Light Manufactures
37	MTL	**FMP**	Metal products	Primary metal productsٌ
38	CAR	**MVH**	Motor vehicles and parts	Transportation equipment
39	CAR	**OTN**	Transport equipment nec	Transportation equipment
40	ELC	**ELE**	Electronic equipment	Electric Machines
41	MAN	**OME**	Machinery and equipment nec	non electric machines
42	OMN	**OMF**	Manufactures nec	other industrial products
43	ELE	**ELY**	Electricity	Electricity
44	ELE	**GDT**	Gas manufacture, distribution	Electricity
45	WTR	**WTR**	Water	Water Distribution (new sector)
46	CON	**CNS**	Construction	Construction & Maintainence
47	FIN	**TRD**	Trade	Trade &Finance &Insurance
48	TRN	**OTP**	Transport nec	Transportation
49	TRN	**WTP**	Water transport	Transportation
50	TRN	**ATP**	Air transport	Transportation
51	TRN	**CMN**	Communication	Transportation
52	FIN	**OFI**	Financial services nec	Trade &Finance &Insurance

Number	Egypt Code	GTAP Code	GTAP Description	Egypt Description
53	FIN	**ISR**	Insurance	Trade &Finance &Insurance
54	FIN	**OBS**	Business services nec	Trade &Finance &Insurance
55	HTL	**ROS**	Recreational and other services	Hotels & Reasturant
56	OSR	**OSG**	Public Administration, Defense, Education, Health	Other personel Service
57	DWE	**DWE**	Dwellings	Housing

3. Data Manipulation: Intermediate Demand

The core portion of the dataset is Egypt's input-output matrix (I-O Table). This table was provided with 32 separate production sectors. The choice of sectors roughly conforms to the 1993 NSA categories, with a few extra sectors that pertain explicitly to Egypt {for example, Cotton Ginning" which is believed to be an important industry in the Egyptian economy.

Intermediate demand is supplied to GTAP as demand for domestic intermediates, and demand for foreign intermediates. The foreign intermediate demand was not available, so demand shares were imputed based upon domestic intermediate demand. This approach is reasonable for most sectors, but may be improved in future versions for some sectors. For example, sector RBR (rubber products), shows that 90% of intermediate demand is for textiles (TEX), and so the imported demand was also imputed this way.

4. Trade Statistics

GTAP requires that demand is separated between demand for imports and demand for domestically-produced goods. This posed a challenge, because the 2003-04 dataset only distinguishes imported inputs for intermediate demand. The dataset did not contain trade totals, and auxiliary data does not match precisely.

This section describes the disparate data, their sources, and how these discrepancies were handled. The fact that GTAP uses their own trade data, means that only the percentage participation of imports are important. Some totals were obtained from various sources listed in table 2.

Table 2. Trade statistics coming from various government sources, 2003-2004 Import and Export Data*

Source	Import	Exports	Tariffs	Units
Original 2003-2004 I-O Table	67,557,458	N/A	N/A	L.E. (Constant)
HS4-Digit Trade Statistics directly from the Ministry of Trade and Industry	69,662,742	41,692,133	7,249,613	L.E. (Current)
HS4-Digit Trade Statistics in US Dollar Terms	11,322,003	6,772,463		USD (Current)
Egyptian Economic Monitor (Volume 1, No.4, June 2005)	18,286,000	10,452,000		USD (Current)

* All figures reported in Thousands, no matter the currency denomination.

5. Data Notes

Because the FIN (Finance) Sector is large relative to the others, it appears that this sector includes margins". Margins are wholesale and retail distribution markups. Typically, these markups represent 25% of total sales in a given country.