Introduction to RunGTAP

Hands-on computing and examining some data
RunGTAP familiarisation

- Open by double-clicking on RunGTAP icon
- Click on the tabs:
  - RunGTAP
  - Version
  - Closure, Shocks, Solve & Results
    - Look at these later when setting up & solving a simulation
- On the Toolbar, click on ‘version’
  - Click on ‘change’
    - We can change to a new version e.g. using a different aggregation of the data
Finding out about the data

In toolbar, click on ‘version’ then ‘change’

Select **ACOR3X3**

Note the regions & sectors

Looking at some base data:

- click on **View|Base Data|Core Data**

Double Click on ‘**VDPA**’  
*value of expenditure on domestic tradable commodities by private households in 1995 US$million*

Double click on ‘**VDFM**’

There are now 3 dimensions!

**VDFM(i,j,r)**

Make sure you are familiar with reading the indices correctly!!
What is the value of the EU’s food sector’s purchases of domestically-produced food?

What is the value of the SSA’s MNFCS sector’s purchases of domestically-produced food?

Now look at the variable VIFM
  - Definition?
  - What is the value of imported food purchases by the food sector in the EU?

What is the total purchases of food (at market prices) by the EU’s food sector?
In GTAP, 5 factor endowments are modelled
- Land (farm sectors only), skilled & unskilled labor, capital and natural resources.

Look at sector purchases of these:
- VFM
- What values of these resources are purchased (market prices) by the food sector in the EU?
So we now know, for the food sector in the EU, the value of its purchases of food (domestic and imported), land, labour and capital.

We can get the same variables, but at agent’s prices:
- Look at VDFA, VIFA, and EVFA

Now write down total purchases of all inputs by this sector (including purchases of manufactured and services intermediates)
- Can calculate cost shares
GTAPView Data

- Click on View|Base Data|GTAPView Output
- This contains variables that have been computed from some of the variables in Base Data.
- Look at NFVA (row 15)
  - This is the cost structure of firms at agents prices
- Go through the drop-down boxes
- Obtain values for the EU
- These are the same as our previous values from the Base Data
- Now in the drop-down box that reads ‘None’, click on ‘Col’
- Now you see the cost structure (% shares) for the EU’s food sector
- For example, note shares of food, unskilled and skilled labour.
- Note how the cost shares differ in the EU services sector
Still in GTAPView
- Look at GDPEXP
- Look at CURRENTACCT

Viewing SET information

Click on View|Sets

Look at
- TRAD_COMM
- REG
- ENDW_COMM
Viewing parameter values

- For example, elasticities
- Click on View|Parameters
- Look at ESUBVA
Where are these data?

- Click on View|Other Text File
- Basedata.har…the base data
- Default.prm……the parameters
- Sets.har………..the sets information.
- These files are automatically created whenever you run an aggregation of the GTAP database
The GTAP model file

- Click on View|TAB files|Main Model
- GTAP.TAB sets out the theory of the standard GTAP model.
- Note the version number and history.
- Scroll down until you see FILES
- GTAP gives the logical names of
  - GTAPSETS
  - GTAPDATA
  - GTAPPARM
to the sets, data and parameter files
- We’ll look at GTAP.TAB a lot more later.