Running the Simulation

And Analysing Solutions

Look at some base data
(US$million)

- ROW's food exports = $237,547 m
- EU's food imports = $237,199 m
- EU's food imports from ROW = $61,302 m
- EU's food trade balance = -$24,923 m

- EU's food self-sufficiency = 98.2%
- So food imports are a very small share of total food consumption in the EU

Re-solve the previous experiment

- Click on **Load Experiment**
    - And find it under your saved name
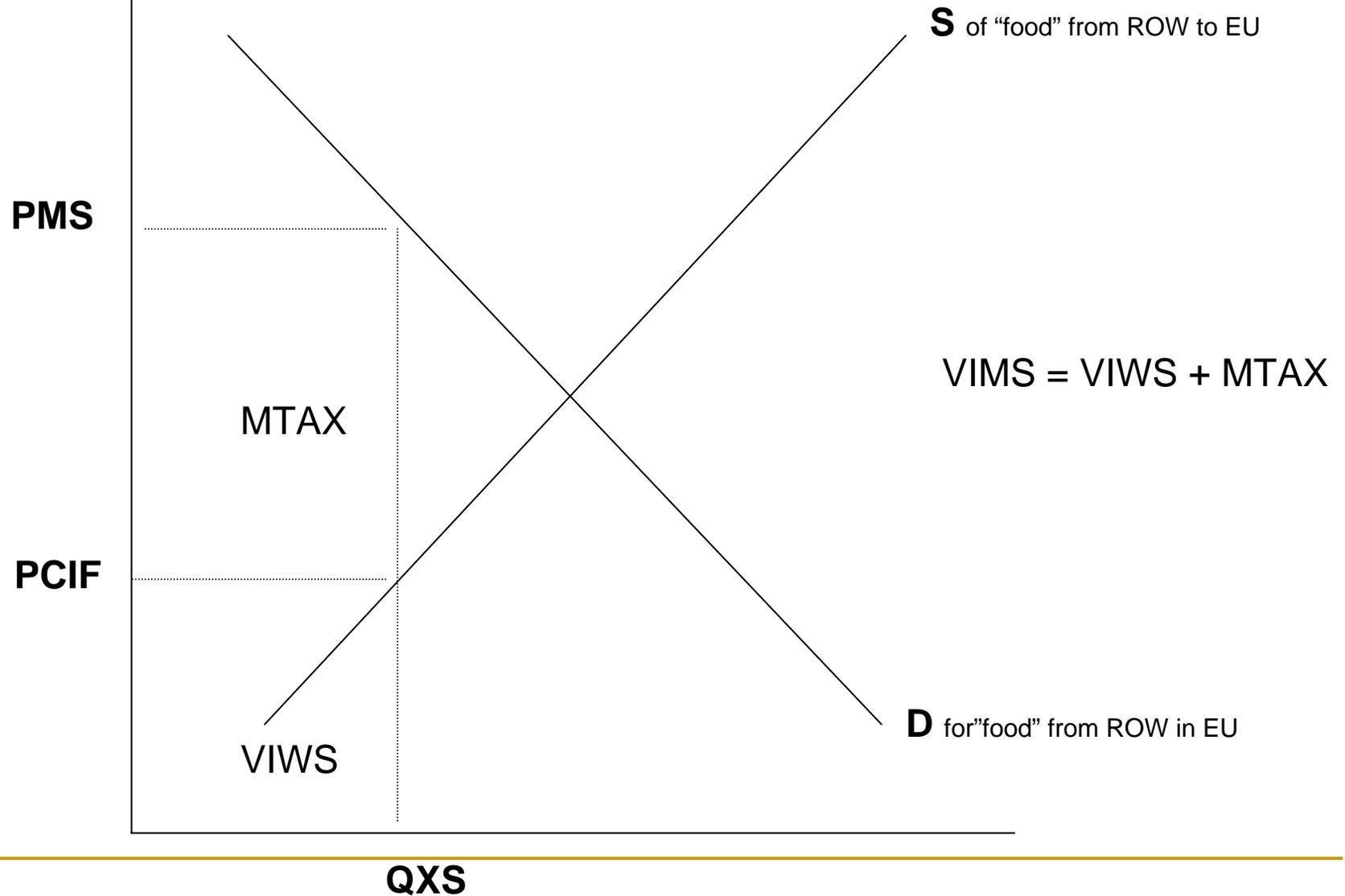   - Check it has the correct shock and other selections

- Shocks
  tms ("food", "ROW", "EU") is to be shocked to zero
  Check you have selected Default parameter file
  and Graggs: 2-4-6

  Click on **Solve**

What results would you expect??

PMS

PCIF

MTAX

VIWS

S of "food" from ROW to EU

VIMS = VIWS + MTAX

D for"food" from ROW in EU

QXS

Examine solution for EU

- What happens to EU's domestic & *cif* prices of food from the ROW?
  - *pms, pcif*
  - *pms = -12.78%*
  - *pcif = +0.32%*
- What happens to the volume of food imports from the ROW?
  - *qxs*
  - *qxs = +60.11%*
- *Is this what you expected?*

- What happens to total volume of food imports into EU? *qiw*

- EU's food trade balance? DTBALi

- What happens to food output in EU? *qo*

- What about the price of food in the ROW market? *pm*

- Does EU's food self-sufficiency fall?

- *To answer this, click on*

  View|Updated Data|Updated GTAP View

# What about factor use in "food" production in ROW?

- Select ROW in left-hand box
- Click on qfe
- Changes in demands for the primary factors by the ROW food sector
- Demand for land has not changed – why??
- Increased demands for all other factors
  - Look at factor price changes in ROW
- Now look at qf
- Increased demand for intermediates too.
- So output/ha has risen – due to increased use of other factors

- How does output of other sectors in EU change?
- What happens to unskilled wages in EU? *pm*
- What happens to skilled wages and price of land & capital in EU?
- As expected? (look at factor shares in costs of each sector in EU)

- So we have general equilibrium effects in other sectors

EU's FACTOR COST SHARES
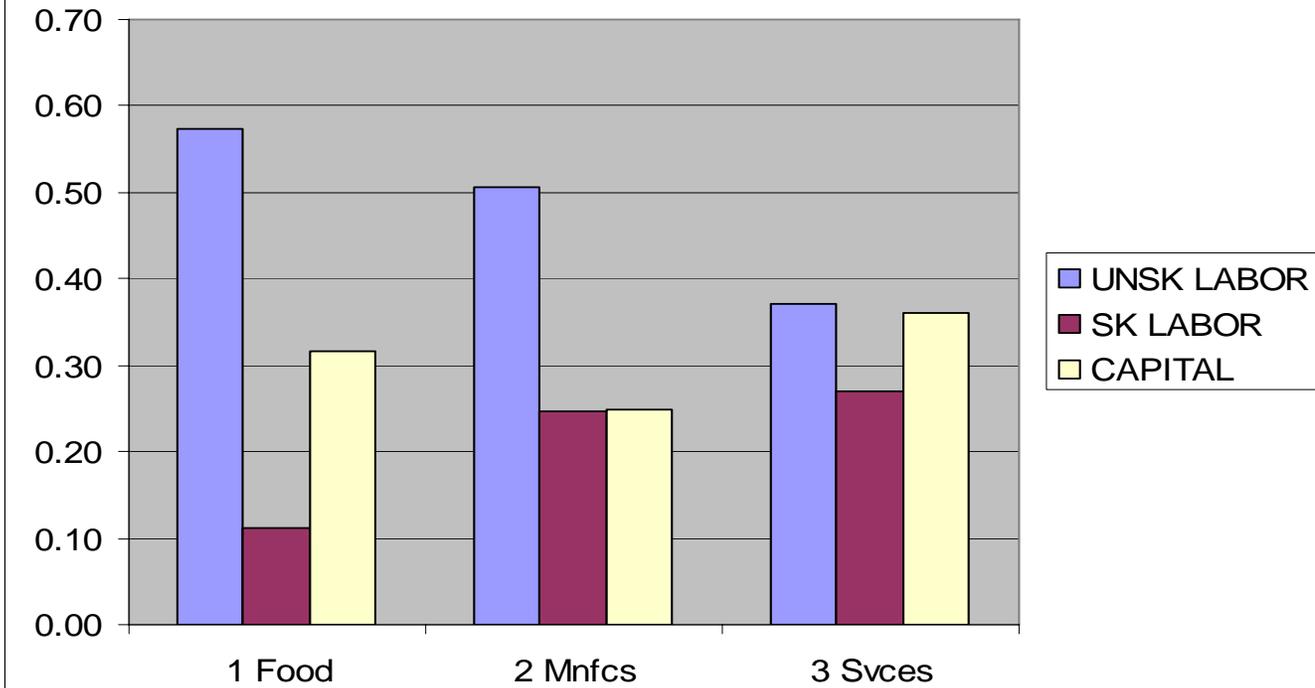
Also GE effects in other regions

- In the ROW
  - Food output rises
  - Food prices rise
  - Output of manufactures falls
  - Price of land rises
  - Food trade balance improves
  - ROW imports of manufactures from EU increase

Was the tariff correctly shocked?

- **View|Updated data|Updated Tax Rates**
- Double click on **line 10**
- 'Food' 'All REG'   'All REG'
- Note the new tax rate is close to zero

Saving the solution data & shocks

- You may wish to keep the solution, perhaps so your report can be written up later
- Click on **File|Save Outputs|Solution file**
- Select directory and give a file name

Copying results to a spreadsheet

- This is extremely useful – copy to spreadsheet
- You can then prepare tables and figures for your reports.
- Eliminates time and potential errors with re-inputting numbers
- Double click on any variable in the solution
- Now click on **Copy** from RunGTAP's main menu
- Now start Excel, and paste!