

# Case Analysis II

Material #3

## **A Guideline for GTAP Simulation**

EE 459 – Semester 2 / 2016

# GTAP – Data Preparation and Simulation

(1) Use GTAPAgg to **create the new global trade database**. Specifically this database is composed of :

- **6 regions** (US, EU, China, Thailand, RoTPP, RoW)
- **10 groups of commodities**

**Then, run these simulations:**

**Scenario 1 (TTIP only):** Imposing zero import tax for all commodities traded among TTIP members (US and EU)

**Scenario 2 (TPP only):** Imposing zero import tax for all commodities traded among TPP members (US and RoTPP)

**Scenario 3 (TTIP + TPP):** Combining the shocks of Scenario 1 and Scenario 2

# Research Tasks

(2) For each scenario, please examine impacts of zero import-tax policies on the following variables :

- **GDP** (“qgdp” on GTAP) of 6 regions
- **Inflation** (“pgdp” on GTAP) of 6 regions
- **Change on Trade Balance** (“DTBAL”) of 6 regions
- Please rank **Thai sectors** that will gain their export volumes according to the zero import-tax policy (ranked by % change in export as shown in **qxw [\* ,Thailand] )**
- Rank **Thai sectors** that will increase their import volumes caused by the zero import-tax policies (ranked by % change in imports as indicated by **qim[\* ,Thailand] )**
- Similarly please rank **US sectors** that will be benefited from the zero import-tax policy (ranked by % change in export as shown in **qxw [\* ,US] )**
- List the **US sectors** that will increase their imports induced by the zero import-tax policies (ranked by % change in imports as indicated by **qim[\* ,US ] )**

# Research Tasks

- (4) Compare main findings obtained from 3 simulations
- Compare positive and negative impacts on 3 main macro indicators (Real GDP, CPI and Trade Balance) of Thailand and those of other countries.
  - Compare positive and negative impacts on 10 groups of commodities of Thailand and those of other countries.
  - Other data sources and methods of analyses are welcome.
- (5) Propose policy recommendations that would lead to the highest benefit of Thailand and that of the US.
- Should President Trump promote the free trade policy?
  - How should Thailand deal with the export-declining sectors and the import-rising industries?
  - What should be Thailand's policy imposed on the export-gaining sectors?

# Suggestions on the 2<sup>nd</sup> Assignment

- (1) Written report : the format typically used by consulting companies (PowerPoint with texts and graphs/diagrams)
- (2) Submit the **hardcopy** in the box attached to my office's door (**March 21, 2017**) and also email the **PowerPoint file** to [nattapong@econ.tu.ac.th](mailto:nattapong@econ.tu.ac.th) (by 5.00pm)
- (3) Presentation date : **March 22** and **24** (time slot : 12 minutes for each group)
- (4) Sequence of presentation : from draw

# Suggestions on the 2<sup>nd</sup> Assignment

(5) Length of report : 12-15 pages

(6) Structure of the report

- **Part 1 – Background of TTP and TTIP**
- **Part 2 - Analytical methodologies and results**
  - Results from GTAP simulations
- **Part 3 - Policy recommendations**
  - Other related info/data are welcome

# Grading Criteria

## **Quality of report (60%)**

- appropriate methodologies (20%)
- critical reasoning in result analysis and policy recommendation (20%)
- format of report (comprehensive graphical communication and concise text explanation) (10%)
- on-time submission (10%)

## **Quality of presentation (40%)**

- convincing verbal explanation (30%)
- comprehensive Q&A (10%)