

Case Analysis II

Material #3

A Guideline for GTAP Simulation

EE 459 – Semester 1 / 2017

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 2nd 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 (**October 10, 2017**) and also email the **PowerPoint file** to nattapong@econ.tu.ac.th (by 5.00pm)
- (3) Presentation date : **October 11 and 12** (time slot : **15-20 minutes** for each group)
- (4) Sequence of presentation : from draw

Suggestions on the 2nd Assignment

(5) Length of presentation: 15-20 slides

(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

(7) **Dress code:** university's uniform

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%)