

Instructions to Replicate Results

By following the instructions here, you will be able to replicate results of “A Comparison of Approaches to Modelling Non-Tariff Barriers”.

SUMMARY

This application of GTAP uses a 7-commodity, 15-region aggregation to simulate and facilitate comparison of the impacts of alternative NTM modelling mechanisms:

- Mechanism 1: AMS iceberg costs
- Mechanism 2: AXS exporter costs
- Mechanism 3: TMS import taxes
- Mechanism 4: TXS export taxes
- Mechanism 5: WTP willingness to pay

REGIONS AND COMMODITIES MODELLED

15 regions modelled:

Singapore*	NewZealand
Thailand*	Australia
Malaysia*	India
VietNam*	Japan
Philippines*	Korea
Indonesia*	China
OtherASEAN	US
ROW	

7 sectors modelled:

Plant Products*
Animal Products*
Wood Products*
Textiles, Leather & Wearing Apparel*
Machinery and Equipment*
Other Manufactures*
Services

* Sectors and regions for which NTMs are reduced

RUNGTAP APPLICATIONS

There are three sets of RunGTAP zip archives to support this application: NTMsAPP.zip, NTMsTMS.zip and NTMsTXS.zip. The applications we provide include the shock files with the pre-calibrated values of shocks relevant to each mechanism.

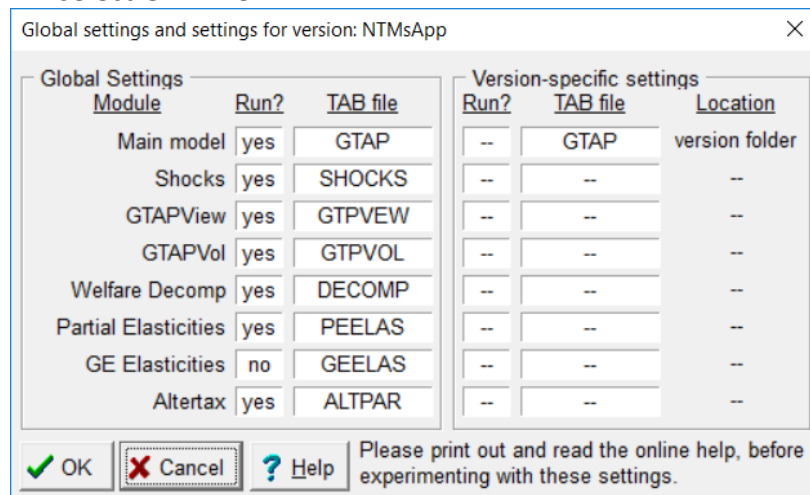
1. NTMsAPP

The experiments included in this RunGTAP archive are:

- AMS: Apply ASEAN goods shocks to the ams mechanism
- AXS: Apply ASEAN goods shocks to the axs mechanism
- WTP: Apply ASEAN goods shocks to the WTP mechanism

To replicate these three simulations

- Open RunGTAP
- Select File < Version Archive < Load Zip < NTMsAPP.zip
- Check you have the version of the GTAP model loaded that includes the additional code required to replicate the simulations:
 - Version < Module and ensure that under version-specific settings, you select GTAP i.e.:



- Once loaded, select the relevant experiments for AMS, AXS and WTP and run each of them
- You can then check that your results replicate those in the paper

For the trade tax simulations (TMS and TXS), we need to undertake two steps:

- Create updated GTAP databases using Altax to include the NTMs in the tariffs (TMS) or export taxes (TXS):
 - TMSalt: Altax sim to create updated database with NTMs included in import taxes, from which the 'TMS' simulation can be run
 - TXSalt: Altax sim to create updated database with NTMs included in export taxes, from which the 'TXS' simulation can be run
- After running each of these simulations, create a new version 'using updated database from last simulation'. Once the separate updated GTAP databases have been created for each of TMS and TXS, you may run the following experiments using these:
 - TMS: Apply ASEAN goods NTM shocks through the TMS mechanism (to be run on the post Altax TMS database)
 - TXS: Apply ASEAN goods NTM shocks through the TXS mechanism (to be run on the post Altax TXS database)

If you do not wish to create your own updated databases for the TMS and TXS replications, you may simply load up the NTMsTMS and NTMsTXS RunGTAP archives (detailed below).

2. NTMsTMS

This RunGTAP application is for running the TMS experiment. The database included here is the post TMS Altertax database. (If desired, readers may create this updated database themselves as described above, rather than loading this RunGTAP archive.)

The only experiment appropriate to run in this application is:

- TMS: Apply ASEAN goods shocks to the TMS mechanism (run on the post-Altertax database)

3. NTMsTXS

This RunGTAP application is for running the TXS experiment. The database included here is the post TXS Altertax database. (If desired, readers may create this updated database themselves as described above, rather than loading this RunGTAP archive.)

The only experiment appropriate to run in this application is:

- TXS: Apply ASEAN goods shocks to the TXS mechanism (run on the post-Altertax database)