East Asia tariff concession:
A CGE analysis

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1. Summary

While there are many studies focusing on the impacts of various trade policy agreements across the world in the recent years, there is not much focus in the literature on the extent to which these agreements are implemented later, in terms of the aspects agreed upon therein. In this paper, we identify the past achievements of the Economic Partnership Agreements (EPAs) in the East Asian regions in terms of tariff removals and suggest future rooms for further economic benefits from trade liberalization in the region. Secondly, we provide the tariff concession dataset in the GTAP database, which distinguishes the tariff removals agreed in these EPAs in East Asia but not implemented yet, from the existing overall tariffs in the benchmark year. The standard GTAP Data Base incorporates all tariff reductions that have been included in the agreements that are in force; however not all of them are implemented in reality. We have quantified the actual tariff removals in the East Asia EPAs at HS6 levels. These will be aggregated to GTAP sectoral level, to arrive at a GTAP-consistent tariff dataset that contains actually implemented tariffs in East Asia. This is suggested to be taken as the actual baseline for policy simulations in the future.

Based on this dataset, we compare the economic impacts of partial versus complete implementation of the trade liberalization agreed in the East Asia EPAs.

This is accomplished in two steps: firstly, we prepare simulations (using the Altertax tool, documented in Malcolm (1998), GTAP Technical Paper No: 12) to switch from the GTAP tariffs to the levels implied by our new tariff dataset; secondly, we evaluate the impacts of reducing the tariffs from the modified levels to those included in the standard GTAP Data Base. The second step gives the difference between completely implementing all tariff reductions included in the agreements and partial implementation that has been done in reality.
1. Introduction

While there are many studies focusing on the impacts of various trade policy agreements across the world in the recent years, there is not much focus in the literature on the extent to which these agreements are implemented later, in terms of the aspects agreed upon therein.

2. Literature review and Descriptive evidence

2.1 Impacts studies on East Asia integration

Previous studies on East Asian integration.
Petri  
Jetro  
CEPII (2 CGEs analysis on ASEAN : 1 on ASEAN integration)

2.2 Asian regionalism

We identify the past achievements of the Economic Partnership Agreements (EPAs) in the East Asian regions in terms of tariff removals and suggest future rooms for further economic benefits from trade liberalization in the region.

Table 1 Tariff concessions in the East Asia EPAs: HS6 digit levels

Tariff removals were agreed in the East Asia EPAs but those have covered just 90 per cent of commodities at HS 6 digit levels.

We provide the tariff concession dataset in the GTAP database, which distinguishes the tariff removals agreed in these EPAs in East Asia but not implemented yet, from the existing overall tariffs in the benchmark year. The standard GTAP Data Base incorporates all tariff reductions that have been included in the agreements that are in force; however not all of them are implemented in reality. We have quantified the actual tariff removals in the East Asia EPAs at HS6 levels. These will be aggregated to GTAP sectoral level, to arrive at a GTAP-consistent tariff dataset that contains actually implemented tariffs in East Asia. This is suggested to be taken as the actual baseline for policy simulations in the future.

Table 2 Tariff concessions in the East Asia EPAs: trade weighted average tariffs
The ratio of tariff removals were even lower at around 40-50 % in terms of trade weighted average of tariff rates.

2.3 Tariff removals in 2020

Using the MACMap-HS6 database (Guimbard et al., 2012), we implement tariff removal at the HS6 level.

3. Scenarios and simulations

Based on this dataset, we compare the economic impacts of partial versus complete implementation of the trade liberalization agreed in the East Asia EPAs. 

Use of GTAP 8.1 dataset.

GTAP CGE model

3.1 Geographical and sectoral aggregation.

As we are focusing on East Asian, we

3.2 Scenarios

We have simulated two scenarios: a realistic one that include concessions of each participants and a stylized one where we remove all tariff barriers between the concerned countries.

3.3 Results

The economy wide impacts of tariff removals will largely be determined by the magnitude of those tariff removals. The more tariff would be reduced, the more imports would be boosted and domestic production may be replaced but the more real income and consumption could be stimulated by lower import costs on the other hand. The over-all impacts of unilateral tariff removals would generally be expected to result in the improvements of economic welfare at the macro level.

The income gains of tariff removals measured in terms of changes in Equivalent Variation according to the past East Asia EPAs are compared with those impacts of full tariff removals using a Computable General Equilibrium (CGE) model of global trade. Those ratios of income gains in Table 3 for East Asia countries by the source countries of imports in the region are shown to be more or less proportional to the rates of tariff concessions in terms of average tariffs (Table 2) rather than those at tariff line levels
(Table 1).

(Table 3 Tariff concessions in the East Asia EPAs: Income gains)

That said, the income gains from tariff removals in the East Asia Regional Comprehensive Economic Partnership (RCEP) are also compared among ASEAN and six (Japan, China, Korea, Australia, New Zealand and India) countries in table 4. It is suggested that ASEAN countries have already committed major tariff removals within ASEAN and in ASEAN+ FTAs in the past but much remain to be done among the remaining six countries; those are expected enjoy around 90% of income gains from the completion of full tariff removals in the region.

(Table 4 Income gains from East Asia import tariff removals)

Conclusion

This is accomplished in two steps: firstly, we prepare simulations (using the Altertax tool, documented in Malcolm (1998), GTAP Technical Paper No: 12) to switch from the GTAP tariffs to the levels implied by our new tariff dataset; secondly, we evaluate the impacts of reducing the tariffs from the modified levels to those included in the standard GTAP Data Base. The second step gives the difference between completely implementing all tariff reductions included in the agreements and partial implementation that has been done in reality.
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