GIFTA Project Briefings Series 04/15 December 2015

# Impact of Integration in Asia and the Pacific Region

Rahul Arora, Sarbjit Singh and Somesh K. Mathur
Indian Institute of Technology(IIT) Kanpur, India

## Introduction

Since the inception of WTO in 1995, and failure of multilateral trade talks under its banner, the foremost policy option used by the most countries is the adoption of Regional Trade Agreements (RTAs) to promote varied socio-economic-politico interest. This move towards regional integration is acceptable under the institutionalized framework of the GATT-WTO[1]. Article XXIV of the GATT, allows for these RTAs, provided they are considered a stepping stone towards multilateral liberalization efforts of the country. Almost all countries in the world today are party to, or are in the process of negotiating, at least one RTA. Since the year 2000, countries of the Asia and the Pacific region actively participated in adopting this policy.

Literature supports the emergence of RTAs as a force behind multilateral trade opening which will result in freer trade worldwide. Baldwin (1993), in his Domino theory of regionalism, explained the positive aspect of these trading arrangements. As per this effect, the potential loss of non-members of an existing trading arrangement induces them to form new trading arrangement or join the existing ones and this effect will further have strengthened with multilateral trade opening. The main idea behind this is to achieve the freer trade worldwide. The prime objective of these agreements is to reap maximum social and economic benefits associated with free trade between member countries. Recent efforts of concluding three mega trade blocs - Trans Pacific Partnership (TPP), Transatlantic Trade and Investment Partnership (TTIP) and Regional Comprehensive Economic Partnership (RCEP) - have raised concerns among the policy makers throughout the world. The emergence of TPP in the Asia-Pacific region with its members from North and South America raised concerns for the non-member countries of Asian region.

Among the non-members, India and China are the main economies in Asian region whose trade share within Asia is more than 50 percent. The exclusion of India and China from this mega trade deal emerged the serious concerns among the policy makers of both the countries due to diversion of their trade towards the member countries of TPP from North and South American region. Further, the emergence of TTIP between World's biggest economy (USA) and largest trading bloc (EU) again raises the concerns among various producers in the developing countries. As per the existing literature, TPP and TTIP have various negative externalities to the developing Asia and the policy makers termed RCEP a savior who will save the developing economies of Asia, particularly India and China, from the negative effects of other two mega blocs. By keeping this concern in mind, we briefly reported the results of our three working papers which consider the economies of Asia and the Pacific region and provide possible solution(s) against the negative externalities from TPP and TTIP.

## Background

The first study is about the calculation of trade costs (using Novy's Methodology,2008) and its impact on bilateral trade flows within Asian trading partners. Using econometric approach, the empirical results show that the bilateral trade within Asia is highly sensitive to the trade costs (observable and unobservable, from transport costs, to the border costs and behind the border costs) associated with it. So the current level of trade costs must be reduced to promote the level of trade in Asia. The inference

[1] Details at: https://www.wto.org/english/tratop_e/region_e/region_negoti_e.htm

of the study may direct the policymakers of this region towards adopting the policy of RTAs within/outside the region because one of the aim of trade agreements are to reduce the trade costs between member countries through reducing tariff and non-tariff barriers to trade. Further, in the second study, using general equilibrium framework, the impact of India's reciprocal tariff liberalization policy with RCEP countries has been evaluated, which shows the effect on members' countries of all three mega blocs including other aggregated regions of the world. The overall results reveal that the reciprocal tariff liberalization by India with RCEP members would lead to positive welfare gains to the RCEP member except Cambodia and Laos. Among the non-members, United States and European Union (28 members) would be affected (negatively) significantly by the assumed policy change. Finally, in the third study, evaluation of India-China proposed free trade agreement (FTA) is done using the same general equilibrium framework. The results of the study show the sign of increasing trade between two big Asian trading partners (India and China engaging in global value chain) with increasing trade deficit of India after the adoption of the policy of tariff reduction/elimination between two trading partners on all tradable goods. Among the losers list, United States and European Union (28 members) again are in the top three. Following three sections provide a quick snapshot of all three studies.

## Trade Costs within Asia: Measurement and Impact

The gravity model of International trade established a fact that International trade of an economy is highly related with the trade costs incurred locally and across the borders. These costs are the difference between production cost of a traded commodity and its price paid by the ultimate buyers. To measure this price difference, between the supply price and final price, one needs data on each and every variable that accumulate the price of a traded commodity from source to the ultimate destination. It includes the data on directly observable variables: policy variables (tariffs and non-tariffs); geographical variables; and environmental variables among others. Due to paucity of data on direct measures, indirect methods to calculate trade costs become popular which infer the trade costs from trade flows by using the gravity model. Novy (2008) has derived a micro-funded trade cost measure by using the gravity model given by Anderson and Wincoop (2003). The advantage of using this measure of trade cost from existing trade flows is that it includes all additional costs involved in trading goods bilaterally relative to those involved in trading goods intra-nationally. The present study used the Novy's measure to calculate the measure of trade costs for Asian countries with their other partners from the same region. It also evaluated the impact of calculated trade costs on the bilateral trade flows by estimating the gravity model. The study found that the calculated trade cost and the available proxies of trade costs have been richly linked with each other for the Asian continent. Further, the estimation of gravity equation clarified that bilateral trade of Asia is highly sensitive to the incurred trade cost. The negative and significant (-6.47) value of trade cost coefficient shows that one percent increase in trade costs leads to 6.4 percent decline in trade of Asian region. So the current level of trade costs must be reduced to promote the trade in Asian region.

## Impact of India's Tariff Liberalization under Regional Comprehensive Economic Partnership (RCEP)

RCEP is a proposed trade agreement between 16 Asia-Pacific countries of which 10 are the member states of Association of South East Asian Nations (ASEAN) and six are of its free trade area (FTA) partners. The partnership agreement is comprehensive in nature and includes modalities related to trade in goods, trade in services, investment and other areas of cooperation. The agreement is still under negotiations and the member countries want to conclude it by the end of year 2016. India as a member country already has an existing trade agreement with most of its member countries and through RCEP its relations with economies of Asia-Pacific will become stronger. The present study tries to investigate the impact of India's reciprocal tariff liberalization policy in goods trade with other RCEP partner countries on member and non-member economies including the major economies of TPP and TTIP. To pursue this task, it has utilized the general equilibrium framework, GTAP model, to evaluate the impact of policy of tariff liberalization on economy-wide variables. The study has aggregated 57 GTAP sectors into 14 sectors on the basis of existing bilateral tariff rates provided by GTAP-9 database. The rates of tariff reduction on different products under one simulation scenario differ according to the corresponding category. The overall results show that India would gain maximum in terms of welfare effect. The benefits of this liberalization will have a positive welfare effect on other members of RCEP except Cambodia and Laos. India would lose in terms of decrease in tariff revenue due to reduction of significant tariff rates to RCEP members. Further, India's imports from member countries would increase and decline from non-member countries which shows significant trade shifting from non-member to member nation. In addition to this, sector-wise results show that India's export will increase in case of Heavy Manufacturing, Light Manufacturing, Textiles and Vehicle & Transport Equipments. United States and European Union (28 members) would be negatively affected by the assumed policy change.

## Impact of Tariff Liberalization under Proposed India-China FTA in Goods

India and China are the part of various trading arrangements in the world and also want to sign a FTA with each other. Since 2003, talks are going on between the two countries but the FTA is still pending. Recent talks between the two countries are highly concentrated on the issue of huge trade deficit of India with China and the signing of the "Five Year Trade and Economic Development Plan" expects the positive outcome. In the present study, an attempt has been made to evaluate the impact of proposed India-China FTA on both of the countries under static general equilibrium framework. For this purpose, the study has utilized the GTAP model of world trade with the presence of skilled and unskilled unemployment in the world. The preliminary analysis through trade indicators depicted that, by using their own comparative advantage together, both of the countries can gain maximum by exporting more to the world. Bilateral trade can also be enhanced through specialization in products with better trade intensity in each other's market. Further, the simulation results confirm that reciprocal tariff reduction (50 percent or 100 percent) in all goods trade would be beneficial for both of the countries than in case of each other's specialized products. It also shows that the policy of tariff liberalization by both of the countries will lead to increase bilateral trade between the two with increasing trade deficit of India from China only. A part of this increase in trade deficit of India will automatically be wiped out by increasing India's exports to the other regions as per the simulation results. Trade generation and shifting would also be significant from both sides. The main looser from trade shifting in the case of Indian imports will be the European Union (28 members), Southeast Asia, Unites States, Japan, Korea, West Asia, and EFTA.

## Policy Implications

The main policy implications are:

- Bilateral trade between partner countries of Asian region is highly affected by the associated trade costs
- RTAs focus on the reduction of those barriers which restrict trade between the member countries such as tariff and non-tariff barriers
- The policy of RTAs is the best option for the member countries to reap maximum economic benefits through increasing trade in particular and overall welfare in general
- The integration of Asia-Pacific countries through RCEP may become the savior for the developing Asian economies against the negative externalities of other two mega trade blocs

## References


Anderson, J. E., & Wincoop, E. V. (2003). Gravity with Gravitas: A Solution to the Border Puzzle. The American Economic Review, 93(1), 170-192.

Arora, R. & Mathur S. (2015). Welfare Implications of India's Trade Liberalization with Its Asian Partners: A General Equilibrium Analysis. Trade and Development Review, 2(2), 69-95.

Baldwin, R.E. (1993). A Domino Theory of Regionalism (NBER Working Paper Series 4465). Cambridge: MA.

Brockmeier, M. (2001). A Graphical Exposition of the GTAP Model (Revised GTAP Technical Paper No. 8). Indiana, IN: Purdue University, USA.

Global Trade Analysis Project. (2015). Global Trade, Assistance, and Production: The GTAP 9 Data Base, Center for Global Trade Analysis. Indiana, IN: Purdue University. Retrieved from: http://www.gtap.agecon.purdue.edu/databases/v9/v9_doco.asp.

Hertel, T.W. (1997). Global trade analysis: Modeling and applications. Cambridge, UK: Cambridge University Press.

Huff, K.M., & Hertel, T.W. (2000). Decomposing welfare changes in the GTAP model (GTAP Technical Paper, No. 5). Indiana, IN: Purdue University, USA.

Mikic, M., & Gilbert, J. (2009). Trade statistics in Policymaking – A Handbook of Commonly used Trade Indices and Indicators. Bangkok, Thailand: United Nations ESCAP.

Novy, D. (2008). Gravity Redux: Measuring International Trade Costs with Panel Data. Warwick Economic Research Papers No 861. http://economics.uwo.ca/conference/thechangingglobal_apr08/novy.pdf.

Pearson, K., & Horridge, M. (2005). Hands-On computing with RunGTAP and WinGEM to Introduce GTAP and GEMPACK (GTAP Resource No. 1638). Indiana, IN: Purdue University, USA.