Integrating India into global production networks through RTAs and productivity gains: The case of the Auto-Parts Industry

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Extended Abstract

(This is a work in progress and the full paper will be made available before the conference)

Recent literature has focused attention on the important question of whether the current trend of proliferation of bilateral and regional trade agreements can facilitate creation and development of international production networks (IPNs) among member countries. However, majority of these adopt a partial equilibrium approach, thus ignoring the economy wide impact. As India gets increasingly integrated through calibrated globalization of its economy over the past two decades and creates a web of such trade agreements, this paper attempts to specifically analyze the effect of recent RTAs involving India on its international trade and production patterns in the auto-parts industry. The auto-parts industry is chosen as this has been identified as one of the high-growth sectors for India's manufacturing sector, with a potential to integrate into existing Asian IPNs, and develop as a hub for global exports. Majority of India's auto-components exports have been destined for UK, USA, Italy, Germany, Mexico, Bangladesh, Sri Lanka and the Middle East countries. This is in contrast with the pattern of other Asian economies such as Thailand, Malaysia, Indonesia where Japan, China and Taiwan has been the major export destinations for their auto-parts , reflecting strong participation in an Asian IPN in this industry.

The paper undertakes an applied general equilibrium analysis of the above issue by utilizing the GTAP 8 database based on 2007 data to simulate the impact of tariff reduction in auto-parts for India's currently implemented RTAs. An additional scenario of a productivity improvement, along with the RTA will also be explored. In order to do this, we carry out an empirical exercise involving the estimation of productivity in India since 1999 using the data from Annual Survey of Industries.

We will employ the PE-GE modelling framework developed by Narayanan, Hertel and Horridge (2010) to analyze the trade policies at disaggregate levels. The sectors considered for disaggregation would be Parts and accessories of motor vehicles, at the HS-6 digit level. This would allow to analyze the impact of such an RTA on the service link costs that are integral to creation of an IPN.

The regions include the major export destinations of India and selected East Asian countries (China, Japan, Korea, Thailand, Malaysia, Singapore, Indonesia). Besides these countries, the regions would therefore include USA, UK, Italy, Germany, Mexico, Bangladesh, Sri Lanka and UAE.

The results of this study are expected to provide insights on whether RTAs in India can create trade in auto-parts by stimulating more exports than attracting imports. The simulation of the productivity shock will provide insights on whether the RTAs along with

productivity improvement will encourage greater exports from India to East Asia rather than just the RTA alone.