Gravity with Multiple Tariff Schemes

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Abstract: In this paper, we contribute to the literature on gravity analysis by explicitly incorporating both most favored nation (MFN) rates and regional trade agreement (RTA) rates. Our gravity equation takes into consideration the fact that all exporters do not necessarily utilize RTA schemes when exporting even to RTA partners. We apply the tariff line-level data on the world-wide trade to this gravity equation. As a result, we find the significantly negative coefficient for (a log of) ratio of RTA rates to MFN rates. From the quantitative point of view, we show that in the first year of Japan-Australia Economic Partnership (i.e., 2015), export from Australia to Japan is expected to increase by 6%, compared with the export in 2014. Furthermore, it is also shown that, based on the subsequent reduction of RTA rates, this magnitude of trade creation effect through tariff reduction gradually rises over time.

Keywords: Gravity; RTA; Preference margin

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