

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 the ratio of RTA rates to MFN rates. Specifically, the introduction of duty-free RTA rates (i.e., the reduction of the ratio from one to zero) increases trade values by 18-30%, depending on specifications. Using our estimates, furthermore, we conduct the simple simulation on the effects of the subsequent reduction of RTA rates on trade.

Keywords: Gravity; RTA; Preference margin

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