Deep Regional Trade Agreements and Cross-border Technology Transfer

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Abstract

In this study, we examine whether deep regional trade agreements (RTAs) facilitate cross-border technology transfer. As a mode of technology transfer, we focus on licensing. We first derive a micro-founded structural gravity equation for cross-border licensing from a model in which heterogeneous firms choose to supply their goods to foreign markets by exports, foreign direct investment, or licensing. We then empirically test predictions from our model by using data on bilateral exports of royalties and licensing fees for 181 countries/regions for the period 1995–2012. Various dummy variables are used to measure the impact of shallow and deep RTAs. In particular, we construct dummy variables that can capture the impact of RTAs with and without intellectual property right (IPR) protection provision, which is categorized in the WTO-extra groups in the terminology of Horn et al. (2010) and Hofmann et al. (2018). Consistent with our theoretical prediction, we find that a shallow RTA without IPR provision may reduce total exports of licensing and that a deep RTA with legally enforceable IPR provision will increase total exports of licensing. The net effect of forming a deep RTA is positive. However, the effects of shallow and deep RTAs on licensing are heterogeneous across country groups (North and South).

Keywords: regional trade agreement; deep integration; technology transfer; licensing; gravity equation.

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