Quid Pro Quo, Knowledge Spillover and Industrial Upgrading

Abstract: While there is a vast body of research on the benefits of FDI in developing countries, whether and how the form of FDI matters have received limited attention. This paper studies the impact of FDI via *quid pro quo* (technology for market access) on facilitating knowledge spillover and quality upgrading. Our context is the Chinese automobile industry, where foreign automakers are required to set up joint ventures (the "*quid*") with domestic automakers in return for market access (the "*quo*"). The identification strategy exploits a unique dataset of detailed vehicle quality measures along multiple dimensions and relies on *within*-product quality variation across dimensions. We show that affiliated domestic automakers adopt more similar quality strength as their joint ventures, compared to non-affiliated pairs. The results suggest that *quid pro quo* generates additional knowledge spillover to affiliated domestic automakers, on top of any industry-wide spillover. We rule out endogenous joint venture network formation, overlapping customer base, or direct technology transfer via market transactions as alternative explanations. Analyses leveraging additional micro datasets on worker flows and shared upstream suppliers among automakers demonstrate that labor mobility and supplier network are important channels in mediating knowledge spillover. On the other hand, while *quid pro quo* facilitates learning, such a requirement is not a prerequisite for knowledge spillover. Counterfactual exercises show that *quid pro quo* is not the primary driver of the overall quality improvement experienced by domestic automakers.