Does Licensing Induce Spillover Effects?

Abstract:
Productivity differences can explain differences in economic growth across countries. It has been demonstrated that the presence of a foreign-owned multinational enterprise (MNE) in a developing country is one of the most important methods through which technology transfer occurs. This presence could be in the form of foreign direct investment (FDI), licensing, or imports from the developing country. However, it is still unclear by what means and how effectively each type of foreign presence affects domestic productivity.

In this paper, I study licensing as one of the channels through which foreign technology is transferred to domestic plants. This technology transfer can occur in one industry and also in related industries, which results in technology spillovers that can affect both intra- and inter-industry productivity. Moreover, the institutional framework of the country can affect the type of foreign presence adopted by MNEs in the host country. Therefore, it is important to analyze the effect of a change in the institutional framework on technology spillovers. This can be achieved by analyzing a set of new and stronger intellectual property rights (IPR).

Using Chilean firm level data for the 2001–2007 period I find that there are positive inter-industry spillover effects when licensing occurs in downstream sectors which result in higher productivity for domestic plants in upstream sectors (backward spillovers).

When evaluating the effect of the IPR measure, I find that stronger IPR measures decrease the backward spillover effect. I also find that the change in policy has a stronger effect on firms that are, on average, smaller and have low productivity.

Keywords:
Spillover effects, Intellectual Property Rights, Chile

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