Abstract

"Greenfield or Brownfield? FDI Entry Mode and Intangible Capital"

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When a firm invests abroad, it can either establish a new facility in its host country or purchase a local firm. These two modes of foreign direct investment (FDI) are known as greenfield investment (GF) and brownfield investment (cross-border mergers and acquisitions, M&A). In light of the growing importance of FDI, many governments have been implementing various policies such as restricting M&As and promoting GF investments. However, the current literature does not provide a rigorous framework for analyzing the welfare consequences of these FDI policies. As such, this paper analyzes the determinants of FDI mode and the policy implications of these decisions. In particular, I investigate two related questions: (1) how do firms choose between the two FDI modes and (2) how does the firm's choice of FDI mode affect welfare in the local economy?

I start with the premise that the key difference between GF and M&A is the role of intangible capital—such as a firm's customer base, supplier network, brand name, and intellectual property. Unlike physical capital, intangible capital can be used in multiple locations simultaneously. If investing firms intensively use their own intangible capital, they are likely to use those intangibles in foreign markets as well, thus relying less on M&A and more on GF. Using a novel US firm-level dataset, I provide the first evidence that multinationals with higher intangible capital systematically invest through GF rather than through M&A.

Motivated by this empirical result, I develop a general equilibrium search model to describe a multinational firm's choice between M&A and GF. In the model, I assume foreign multinationals are heterogeneous in intangible capital. A multinational firm searches for a partner, and chooses M&A if it matches with a local target firm; otherwise, it invests via GF. The attractiveness of M&A, in turn, depends on the expected return from acquiring intangible capital, which is decreasing in the firm's own intangible capital stock. The model predicts that multinationals with lower levels of intangible capital prefer to invest via M&A, consistent with the empirical result.

The model implies that equilibrium FDI patterns can be suboptimal from the host country's perspective. Therefore, there could be room for the local government to improve local welfare using FDI policies that incentivize one entry type over the other. To assess this possibility, I estimate the model and conduct counterfactual experiments. Interestingly, the optimal policy response differs between developed and developing countries. In particular, since the gap between productivities of multinationals and local firms is larger in developing countries, policymakers there can increase welfare by incentivizing FDI through M&As. By letting highly-productive multinationals utilize local intangible capital, this policy increases aggregate productivity more than the laissez-faire outcome.

Keywords: FDI, Cross-border M&A, Greenfield FDI, Intangible capital

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