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Further Reading:
Mei, J. C., The Growth Effects of Foreign Direct Investment: Theory and Evidence. *The 12th FIW Austrian Institute of Economics - International Economic conference paper (2019)*; *The 15th Australasian Trade Workshop conference paper (2020)*.

Mei, J. C., *Refining Vertical Productivity Spillovers from FDI: Evidence from 32 Economies*. International Review of Economics and Finance (under review).

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Macroeconomics and Finance at the Whitaker Institute for Innovation and Societal Change

The Growth Effects of Foreign Direct Investment

The potential benefits from foreign direct investment (FDI) are viewed as important, as technology transfers resulting from FDI can lead to higher productivity of domestic firms, thereby boosting a host country's growth rate. Economists and policymakers in many developing economies thus believe firmly that FDI plays a key role in the economic convergence process; they expect that inward FDI can bring the introduction of new production processes, advanced knowledge, know-how, employee training, and better management practices. While the question of whether the growth effects of FDI are guaranteed has been discussed for a long time, the empirical evidence in the literature remains oddly inconclusive. One plausible explanation for the mixed findings is the initial differences between home and host countries, which might distort the positive externalities of FDI. But why might we expect these initial differences to matter? And is this explanation supported by the data?

Research Findings

In my theoretical model, the multinational firms from the U.S. (the leader) are assumed to participate in innovation and adaptation activities (FDI). The firms innovate new types of intermediates in their own country, whilst adapting these innovated intermediates in other countries (the follower). The firms face a cost of adaptation when adapting intermediates in the follower countries; this cost is assumed to be lower if the initial differences in terms of the relative levels of technology and human capital between the countries are small. The cost is higher when the firms have done several adaptation activities in the follower countries, as the adaptation is usually carried out from the easiest to the most complicated product. The model predicts that the initial differences between the U.S. and the host-countries will determine the growth effects of FDI. Then, I empirically examine this model prediction by using data across 67 countries through the period 1977-2007. The empirical results confirm the model prediction, suggesting that FDI has a positive effect on the relative level of GDP per capita between the countries, and this positive effect is dependent on the initial differences between the countries. I then test whether the results are driven by the unobserved time-invariant effects, the potential business cycles, and also the potential endogeneity in my econometric model. The results are robust to these concerns. This empirical finding, together with my extended theoretical model, suggests that the initial differences between home and host countries explain differences in the growth effects of FDI.

Policy Implications

The implication for policymakers is that government policies need to put more effort into improving the stock of human capital and the level of technology, as they are the key determinants of the benefits of FDI for host countries. FDI can bring advanced knowledge from world-leading nations and is still one of the best ways for developing countries to catch up with the world's advanced economies. Yet, the results also show that the marginal effect of FDI decreases as the level of technology and human capital increase, similar to the catch-up phenomenon. Therefore countries with higher levels of technology and human capital should also invest in innovation rather than just relying on attracting new inward FDI.