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Book review

Review of foreign direct investment: Analysis of aggregate flows by Assaf Razin and Efraim Sadka

The literature on flows of foreign direct investment (FDI) between developed and less developed countries characterizes such flows as reallocating capital from high income, capital rich countries to low income capital poor countries. However, this view that FDI is a mechanism for reallocating capital and equalizing rates of return across countries cannot explain the lion's share of FDI since most of these flows are two-way flows between developed countries with similar incomes and capital-labor ratios. In this book, Razin and Sadka develop a framework capable of explaining FDI flows between similar countries where rates of return are already equalized. (The mechanism they outline can also operate between dissimilar economies.) The theory they develop is both elegant and parsimonious and gives rise to numerous conclusions that appear to be borne out by both casual empiricism and more formal econometrics grounded in the theory. The book provides a stimulating introduction to FDI decisions to novices to the field (like the reviewer) and should also provide new insights to veteran researchers in the area.

The key to Razin and Sadka's approach is the idea that foreign investors are assumed to have a comparative advantage at identifying profitable investment opportunities in the domestic, host country. They model this by assuming foreign firms have lower fixed setup costs for undertaking investments than do domestic firms. This cost advantage gives rise to two key results. First, the efficiency gains from FDI determine FDI flows. Second, and much more important for the empirical analysis that follows, there is a threshold entry level for FDI because of the setup costs it entails. Some potential FDI firms will simply choose not to enter the market.

At this point the analysis is micro in flavor allowing for firm level heterogeneity. In order to move to the analysis of aggregate FDI flows, Razin and Sadka present a version of their model that focuses on cross country differences in productivity. In this framework, an increase in host country productivity has two distinct effects on FDI decisions. First, the increase in productivity makes FDI more profitable thereby tending to increase FDI. However, in a general equilibrium setting, the increase in productivity in the host country raises wages in the host country. To the extent that FDI setup costs rise as a result of this wage increase, it becomes less likely that FDI takes place at all. That is, at the intensive margin FDI increases but at the extensive margin FDI falls.

This last insight of the model is the key to empirical work which argues that traditional OLS and Tobit estimates of FDI flow equations suffer from a sample selection bias because they ignore the decision of whether or not to engage in FDI at all that is implied by setup costs. This is of considerable practical importance because, in any panel study of FDI flows, many of the flows between potential source-host country pairs are zero. Razin and Sadka use Heckman's method's to deal with this problem and simultaneously estimate a flow equation for FDI along with a participation equation reflecting factors determining whether or not a potential source-host country pair has any FDI flow at all. Their central finding is that, when Heckman's methods are applied, there is a significant negative correlation between the error terms of the FDI flow equation and the FDI participation equation implying that these decisions are not independent. Moreover, the negative correlation is consistent with their theoretical model which stresses the importance of fixed setup costs for FDI. In their model an increase in host country productivity, for example, is predicted to increase FDI flows while simultaneously driving up setup costs and making participation in FDI activities less likely.

At both a theoretical and an empirical level, Razin and Sadka's treatment yields many interesting insights into FDI. The implications they are able to flesh out from the idea "that firms get involved in foreign operations in order to exploit this unique [information] advantage that they have accumulated over time" (p. 46) are both numerous and insightful. However, the notion that foreign investors have a comparative advantage at identifying profitable investment opportunities relative to domestic investors in the host country begs two questions. First, why should we expect foreign firms to have an informational advantage when compared to domestic firms? Is it reasonable to argue that U.S. investors are somehow better able to assess investment opportunities in France than the French are? In fact, without any evidence to the contrary, it seems much more natural to assume that domestic firms have an informational advantage compared to foreign firms. Second, where did this comparative advantage come from in the first place? If it is truly "accumulated over time" it would be nice to develop a dynamic model entailing investment in both information and FDI.

Despite these concerns I find Razin and Sadka's work compelling. The theory is rich and the empirical insight that OLS and Tobit estimates of FDI flows suffer from sample selection bias appears fundamental. Their book provides a concise, unified treatment of one of the most important sources of international capital flows in today's world economy.

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