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Tax incentives for import-substituting foreign investment: Does signaling play a role?

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Abstract

This paper constructs a game-theoretic model to study host country policy to attract import-substituting foreign direct investment (FDI). Investors are assumed to be incompletely informed about local investment conditions, and taxes and tariffs are determined endogenously. We show that in certain situations countries will offer tax incentives while in others they will impose a tariff wall to induce FDI. Tax incentives are motivated by the need to signal favorable investment conditions. The paper predicts that tax incentives are more likely to be used the larger is the investment risk, the smaller is the local market, the smaller is the stock of previous FDI, and the lower are trade barriers. Moreover, we conjecture that incentives are positively correlated with the number of jobs created by the investment. We test these predictions using data from the US Department of Commerce benchmark survey of US foreign investment and find that they are supported by the empirical evidence. © 1998 Elsevier Science S.A.

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1. Introduction

Many countries actively encourage the inflow of foreign direct investment (FDI). Among the incentives given to foreign investors are tax concessions,

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subsidies, tariff concessions on imports of intermediate products, and the provision of local infrastructure. In the empirical literature on FDI incentives [e.g., Mintz (1990) and Guisinger et al. (1985)], the use of these instruments is usually interpreted as a sign of competition between governments for footloose firms. However, this gives only an incomplete picture: for instance, roughly half of the FDI projects surveyed by Guisinger et al. (1985) in a study for the World Bank were set up to serve a specific local market. Moreover, according to the 1982 benchmark survey conducted by the US Department of Commerce, many foreign affiliates of US companies reported receiving tax concessions from host governments even though most of their output was sold in the host country market. Incentives given for such import-substituting investment are hardly a result of competition between potential host governments. Why then do we observe them?

The benefits of import-substituting FDI are obvious: among other things, FDI promises employment, access to new technology and management skills, and better manpower training; most importantly, as a number of economists would argue (see, for instance, Musgrave, 1964), FDI brings tax revenue. But why would countries give up valuable tax revenue in the form of tax incentives or subsidies to encourage import-substituting FDI? There is considerable empirical and anecdotal evidence in the trade literature that suggests that tariff and nontariff barriers, by raising the cost of exporting (probably a firm's most important alternative to FDI), are an effective and potentially cheaper means of inducing import-substituting FDI (see, for instance, Brander and Spencer, 1987). The reason for providing tax incentives instead of forcing companies to 'jump the tariff wall', we argue in this paper, is that FDI involves a great deal of incomplete information. Investors often are uncertain about local business and production conditions; these conditions are at least in part controlled by the government and the government may be better informed about them than investors. To attract FDI, governments may therefore have to signal a positive investment environment to foreign firms. Tax incentives can serve this signaling role better than tariff walls.

To support our signaling argument, we first construct a simple incomplete-information model of the relationship between a host government and a multinational firm. In the model, the host government chooses taxes and tariffs and the firm decides whether to invest in the host country or to export from an existing home country plant. We determine the Nash equilibrium of the game between the government and the investor, and derive conditions under which the government will use tax incentives (reveal information) and under which it will resort to a tariff wall (not reveal any information) to induce FDI. The predictions of the model relate the use of tax incentives to exogenous factors including country risk, market size and the existing stock of FDI. In a second step, we test these predictions using data on tax incentives from the Department of Commerce 1982 benchmark survey.

The empirical relevance of the incomplete-information problem that we examine in the paper is well documented in the literature. In the study of investment behavior conducted by Reuber et al. (1973), the companies polled cite the lack of