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Competition in taxes and performance requirements for foreign direct investment

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Abstract

Tax incentives offered to attract firms engaged in foreign direct investment are often tied to performance requirements such as domestic content restrictions or adherence to environmental standards. The tax competition literature has repeatedly shown that competition between municipalities for mobile firms tends to drive taxes to low levels. One would expect a comparable result for burdensome performance requirements. Despite this, the evidence suggests that while taxes have indeed been driven down, performance requirements are as popular as ever. We explain this seeming conundrum by showing that in the presence of spillovers, binding performance requirements can act as a coordination device for firms. In equilibrium, municipalities choose performance requirements, which maximize joint surplus from investment. Competition between municipalities then transfers this surplus to firms via tax subsidies.

JEL Classification: F21; F23; H25

Keywords: Foreign direct investment; Tax competition; Domestic content requirements

1. Introduction

Of the many policy tools available to manipulate foreign direct investment (FDI), two of the most prominent are taxes and performance requirements (PRs) such as domestic content requirements. As Graham (2000) notes, both tax subsidies and PRs are frequently

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used by both developed and developing nations. Often these tax subsidies are directly contingent on the multinational enterprise (MNE) satisfying various PRs (MITI, 2000). Examples of such are numerous. For instance, several jurisdictions link incentives to employment levels. In Georgia, USA, when a firm creates 15 or more jobs, it is eligible for a payroll tax credit, provided that the average wage is at least 110% of the average in the lowest wage county.[1] When the Korean firm Hynix invested in Eugene, Oregon, the firm was promised 3-year property tax exemptions with renewals conditional on it expanding employment by 10% each time (Rowan and Witt, 2003).[2] Other incentives are conditional on the location of investment within a country. For example, firms investing in eastern Germany can have as much as 100% of their worker training paid for by the government (compared to 30% in the west).[3] Elsewhere, these breaks are dependent upon export requirements, such as Slovakia's 100%, 5-year tax rebate for incoming MNEs that export at least 60% of their output. Elsewhere, incentives are given for certain undertakings. In response to concerns over pollution, Taipei China offers foreign firms investing in pollution abatement corporate income tax reductions of 5–20%.[4] Similarly, almost every government offers special tax breaks only available to firms engaging in *R&D*.[5] While tax competition between locations for FDI has been widely studied, we are unaware of any work which considers competition in PRs. As Wilson's (1999) survey highlights, tax competition models frequently predict a "race to the bottom" in which taxes are set lower than the host would like. This occurs as potential locations undercut one another in attempts to attract mobile investment, evidence of which is found by Devereux et al. (2002). On the surface, it might seem that if firms find PRs burdensome, then competition should reduce them just as it reduces taxation. This concern is especially prevalent among critics of globalization who fear an erosion of pollution and labor standards as jurisdictions compete for mobile firms.[6] However, the bulk of the evidence suggests that no such erosion is occurring. In fact, Graham (2000) suggests that much the opposite is true. This poses a conundrum: Why are taxes bid away while PRs are not?

We seek to resolve this issue by suggesting that while from the perspective of any *individual firm* PRs may not be viewed as beneficial, it may still be the case that from the joint perspective of *all the firms and the municipality* they may be highly desirable. One of the most highly touted benefits of FDI is that it creates spillovers. We interpret "spillovers" quite broadly to include not only the typical examples of effects between firms such as technology transfers and worker training (which benefits future employers), but also the effects between the firms and municipalities such as the benefits of employment, costs of pollution, and any other effects of FDI that MNEs do not internalize. Helleiner (1989) and Caves (1996) summarize a variety of evidence that points to the importance of spillovers. In a recent example Okamoto (1999) showed that US suppliers with ties to Japanese automakers have total factor productivity growth rates 8.9% higher than comparable firms without these links. Okamoto attributes part of this productivity gain to

[1]See details at http://www.seda.org/uploadedfiles/1508_1028_DDPubs_TaxesInc.pdf.

[2]In 2003, the firm did not meet this requirement and was therefore given only a partial tax reduction.

[3]See details at http://www.worldwide-tax.com/germany/ger_invest.asp.

[4]See details at http://www.actetsme.org/taip/ipitai.htm.

[5]See OECD (2003) for a listing of the various incentives offered and the qualifications must be met for firms to receive them.

[6]Levinson (1996) and Dean (2002) provide recent surveys of the former while Dunning (1993) and Graham (2000) discuss the latter.