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Tax competition when firms choose their organizational form: Should tax loopholes for multinationals be closed?

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Abstract

We analyze a sequential game between two symmetric countries when firms can invest in a multinational structure that confers tax savings. Governments are able to commit to long-run tax discrimination policies before firms' decisions are made and before statutory capital tax rates are chosen non-cooperatively. Whether a coordinated reduction in the tax preferences granted to mobile firms is beneficial or harmful for the competing countries depends critically on the elasticity with which the firms' organizational structure responds to tax discrimination incentives. A model extension with countries of different size shows that small countries are likely to grant more tax preferences than larger ones, along with having lower effective tax rates.

Keywords: Tax competition; Multinational firms; Preferential treatment

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1. Introduction

The issue of why firms choose a multinational structure has received much attention in the modern theory of international trade. According to this theory, savings in transportation costs and tariff-jumping arguments are among the core reasons for firms investing in more than a single country (Horstmann and Markusen, 1992). Tax savings, on the other hand, have so far played hardly any role in this literature. This is surprising, because 70% of FDI inflows and more than 90% of FDI outflows occur between the developed countries (Markusen, 2002, Table 1.2) which are characterized, on average, by high corporate taxes, but relatively low tariffs and transportation costs.[1] There is by now substantial empirical evidence that multinational firms are able to significantly reduce their corporate tax burden by

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[1] Using revenue collections as an indicator, tariff revenue was only about 10% of corporate tax revenue in the United States in 2003 ($ 21 billion vs. $ 200 billion). In the European Union, the share of tariff collections over corporate tax revenue is even lower, due to the high volume of tariff-free intra-European trade. See OECD (2005).

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transfer pricing and other profit shifting strategies (Hines, 1999; Bartelsman and Beetsma, 2003). Moreover, a rising share of FDI occurs in knowledge-based industries where a large part of earnings consists of royalties and license fees that can easily be shifted internationally.[2] While precise quantifications remain difficult, these tax savings are arguably at least as important from the perspective of multinational firms as the reduction of transportation costs or tariffs. Nevertheless, the extensive literature on taxation and foreign direct investment (see Gresik, 2001 for a survey) has so far not considered taxes as a potential *cause* for the choice of a multinational form, but has instead focussed almost exclusively on the *consequences* for tax policy of the existence of multinational firms.[3]

In this paper we present a model where firms endogenously choose a national or a multinational form, in response to the tax advantages accorded to a multinational status. These tax advantages may come in several forms. In Europe, for example, governments increasingly grant special tax preferences to multinational enterprises (MNEs) that are not extended to domestic firms. The EU's Primarolo Report (1999) lists a total of 66 examples of discriminatory tax preferences in favour of MNEs. A typical case are Belgium's special tax rules for large, foreign-based corporations that establish a coordination center in the country. Under this law, the normal statutory tax rate is applied to a very narrow 'notional' tax base, leading to effective tax rates that are close to zero for most of the benefitting firms (Primarolo Report, 1999, A 001).

While special tax laws favouring MNEs are a particularly visible kind of tax discrimination, they are not the only one. Some MNEs can shift profits elsewhere, for instance to the 35 offshore tax havens identified by the OECD (1998, 2000). A weak enforcement of transfer pricing rules equally grants MNEs a tax advantage over domestic firms, and thus acts as a discriminatory device.[4] These examples demonstrate that discriminatory tax reductions in favour of mobile, multinational firms have become widespread. Moreover, tax discrimination can be actively influenced or controlled by national governments, and can therefore itself be viewed as a strategic policy variable.

In the political debate, the current consensus in both the OECD and the European Union seems to be that tax discrimination in favour of mobile firms is both 'unfair' and 'harmful'. The EU has adopted a *Code of Conduct* for business taxation (European Communities, 1998) under which member states have committed themselves to phase out existing tax preferences, and a similar policy goal is pursued by the OECD. From a theoretical perspective it is by no means obvious, however, that discriminatory tax policies are harmful in a world where national or sub-national jurisdictions are free to choose corporate tax rates independently. Instead, tax *rate* competition may well be intensified when the possibility to tax-discriminate between internationally mobile and immobile firms is reduced.

To capture the central features of the resulting interaction between countries and firms, two model elements are important in our view. As mentioned above, the first element is that tax concessions offer an incentive for firms to invest in a multinational structure, in order to benefit from these tax advantages. The second element is the long-term nature of most tax concessions, which are changed far less frequently than statutory tax rates. This observation applies to both the formal enforcement of transfer pricing rules, codified in national tax laws, and to many of the special tax preference schemes that explicitly aim at organizational adjustments within the tax-favoured multinational group. In the example of the Belgian coordination centers mentioned above, the tax preferences implied by the narrow tax base have been in effect continuously since 1983. Given the long-term commitment to maintain its tax preference, a large number of multinational groups have been attracted to Belgium, despite the uncertainty about the development of statutory tax rates, which were changed five times since the beginning of the preferential tax rule.[5]

In this paper we set up a model that incorporates these elements and analyze the effects that the firms' endogenous choice of organizational form has on optimal corporate tax policy. Specifically, we model a sequential game between two symmetric countries in which governments decide in a first stage on the degree of tax preferences for internationally mobile firms. Firms then decide on whether to invest a fixed cost and set up a foreign division in order to qualify for these tax reductions. In the third stage, governments compete for mobile capital by means of statutory corporate tax rates, before firms make their investment decisions.

[2] As an example, Microsoft has moved some of its R&D operations to a subsidiary in Dublin, allowing the company to channel a disproportionate share of its profits from European sales to low-tax Ireland (12.5% corporation tax). See Wall Street Journal, November 7, 2005.

[3] One exception is Janeba (2000), who analyzes the incentives for a monopolist to install capacities in each of two countries, in order to induce tax competition between them.

[4] Bartelsman and Beetsma (2003, Table 1) give details – based on information collected by Ernst & Young – on the formal enforcement of transfer pricing rules in 16 OECD countries. This comparison documents substantial international differences in the enforcement of transfer pricing rules and their econometric results indicate that a stricter control of these rules does indeed reduce profit shifting.

[5] See Weichenrieder (1996) for an account of the response of German firms to this and other special tax schemes in the EU.