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Double Bertrand tax competition: a fiscal game with governments acting as middlemen

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Abstract

In a common market with costless mobility of all factors regional governments can attract mobile firms by granting subsidies which they must finance out of wage taxes on mobile labour. Firms locate where subsidies are highest and workers settle where taxes are lowest, forcing government 'in the splits' (double Bertrand-type tax competition). Initially, there is unemployment in the economy. Regional governments then behave like middlemen in the labour market, and the fiscal game takes the form of competition among strategic intermediaries. Results from the theory of intermediation are applied to this framework. It is shown that government size may increase rather than decline in a fiscal competition, that industrial clustering may emerge from tax competition, and that tax competition may alleviate the unemployment problem. © 2001 Elsevier Science B.V. All rights reserved.

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1. Introduction

Tax competition may be the offspring of governments' fight against high unemployment. Governments typically want to help their economies prosper, and with unemployment galore many believe that actively attracting investment by

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providing subsidies or preferential tax treatment is a good means to this end. If they luckily lured an investor to their jurisdiction, politicians can proudly point to the jobs they successfully 'created' and which, in their interpretation, would have been lost to other regions had they not fought so bravely against their competitors from other jurisdictions. The strive to attract businesses not too seldom takes the form of tax competition games and veritable bidding wars (Black and Hoyt, 1989; Haaparanta, 1996). Fiscal games of this type are played among national governments as well as, on the subnational level, between regional or local ones.

In any case, offering fat bribes is not without cost, and largesse to mobile investors usually requires a deep hand in some taxpayer's pockets. Ignoring the intricacies of tax incidence, any tax cut for companies and any tax-financed subsidization of firms effectively involves a redistribution from some other taxpayers to capital owners, for whom the subsidies or special tax treatments represent pure gains. In the absence of intergovernmental funds sharing, all subsidies or tax breaks have to be financed out of the budget of the government that grants them — and hence out of its own revenues from other tax bases.

The tax bases supposed to foot the bill for attractive subsidy packages for mobile investors can themselves be mobile or immobile — which makes up for a crucial difference in the strategic incentives for governments when entering into a fiscal game. Assume, e.g., that there is only one such tax base available, say labour income.

- If, as it is commonly assumed in tax competition models, workers are immobile between jurisdictions, their incomes offer a rather inelastic tax base which governments can resort to when competing for investment. As a result, one finds both a high tax burden on immobile tax bases and a high subsidization of (or a low tax burden on) mobile tax issues (see, among many others, Bucovetsky and Wilson, 1991).
- If, however, workers are also mobile between jurisdictions and choose their residence such as to avoid high tax burdens, governments face a trickier task: To attract investors they have to provide sufficiently generous subsidies or preferential tax treatment the costs of which have to be covered from taxes on mobile households. Taxpayers, however, will only want to live in a jurisdiction when (i) there are enough jobs (say, when subsidies are high enough to make firms settle there), and when (ii) tax rates are sufficiently *low*. Obviously, this forces governments 'in the splits': They are required to finance generous expenditures out of low taxes.

In this paper we present such a model of tax competition among governments 'in the splits': Governments lure mobile investors by high subsidies and mobile households by job opportunities and low income taxes. We use 'subsidy' as a generic term for any measure that is to the benefit of investors and that is —