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Transfer and tax competition in a system of hierarchical governments

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Abstract

This paper analyzes the relation between tax competition and interregional transfer in an economic geography framework. In the absence of a transfer scheme, we show that a purely decentralized tax system in an economy with asymmetric regions can lead to more agglomeration effects than those resulting from the free market location equilibrium. Moreover, the model suggests that a transfer mechanism with an explicit redistributive character leads to a lower local tax pressure. Finally, we show that a myopic behavior adopted by the region which contributes to the transfer gives rise to an involuntary decrease in the federal tax.

JEL classification: H2; H5; H7; R12
Keywords: Agglomeration; Tax competition; Transfer; Federal system

1. Introduction

The federal government is often seen as having two fiscal roles: redistribution across the regions of the federation and internalizing fiscal externalities that may arise in horizontal relations between the regions (Keen, 1998).

The latter function, arising from efficiency concerns, has received particular attention in the literature. The main message of this literature is that independent governments engage in a wasteful competition for mobile tax base through reductions in tax rates and supply of local public goods (Zodrow and Mieszkowski, 1986).[1] Positive horizontal externalities emerge from

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[1] Recent excellent surveys on this literature include, Wilson and Wildasin (2004), Cremer and Pestiau (2005).

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this competition since each government ignores the positive effect on the other government's budgets of its tax base outflows in response to higher taxes. Thus, tax rates tend to be too low in equilibrium from an efficiency point of view. Federal government may achieve the internalization of these externalities by a variety of means. For instance, Wildasin (1989) derives a matching grant to eliminate inefficient capital tax competition.

Our paper explores the other fiscal role of the federal government. The federal policy is largely designed and implemented to serve redistribution across regions and national equity rather than efficiency objectives (Keen, 1998; Köthenbürger, 2002). In many countries, for instance in Germany, Russia, Australia and Canada, intergovernmental transfers are a large part of the fiscal federal system. In these countries, regions or sub-federal governments with below average tax revenue receive some additional funds from high-income regions.[2] At a larger scale, the Structural Fund and the Cohesion Fund favor redistribution within the EU. The Berlin's meeting of the European council in 1999 allocated 213 billion euros for the period 2000–2006 to regions and states that lag behind in development. Moreover, transfer systems typically include some equalizing component intended to compensate for the differences in fiscal capacities that inevitably arise from decentralization (Boadway, 2004). In most of the federal systems, taxing powers are not centralized and then, regions linked by a transfer system are engaged in tax competition at the same time. This suggests an interesting interaction between transfer system and tax competition. While there is a relatively large literature on tax competition, it is only recently that the relation between tax competition and transfer has been formally addressed. Smart (1998) and Bird and Smart (1996) suggest that the existence of equalizing transfers may have important effects on the behavior of sub-level governments. Local governments have an incentive to suppress the tax base by imposing higher tax rates. The negative effects of higher tax rates on a region's tax base are partly compensated by higher equalizing transfers from the federal government. A transfer system can thus create poor incentives for local governments to raise their own revenues. This effect is obvious in a revenue-pooling system, such as that used in Germany or Russia, in which a given share of locally collected taxes is distributed among all local governments. In such a system, the cost of local taxation may be higher than the benefit to the local expenditures. Baretti et al. (2002) have argued that the resulting disincentive effect has a significantly negative impact on states' tax revenue in Germany and distorts their fiscal decisions. Köthenbürger (2002) gives certainly the most complete theoretical approach of the relation between tax competition and transfers. Using the traditional tax competition model with capital mobility, Köthenbürger (2002) shows that in a tax base equalization scheme, local governments that behave competitively can attract a higher transfer when marginally increasing their tax rate. Therefore, they choose a higher tax rate than in the absence of transfer scheme. Considering large open regions and strategic effects does not strongly affect the preceding results.

The purpose of this paper is to further analyze the origin of the transfer systems and the interactions they imply between central and local governments. Our contribution goes in the following directions.

Firstly, we address the spatial justification of a transfer system while the previous works do not explicitly consider it. Boadway (1996, 2004), Oates (1999) and other observers see transfer systems as playing an important role in allowing poorer jurisdictions to compete effectively with fiscally stronger ones. Precisely, Boadway and Flatters (1982) and Boadway (2004) suggest that the rationale for transfer is to offset distorting locational incentives which occur when the differences in fiscal capacity give rise to purely fiscal incentives to migrate from one region to

[2] See Bird and Smart (2002) for a survey on the intergovernmental fiscal transfers adopted in a number of countries.