Strategic fiscal interaction among OECD countries

Pantelis Kammas

Abstract This paper investigates whether OECD countries compete with each other for mobile factors by using various fiscal (tax-spending) policy instruments. We use a panel dataset of 20 OECD countries over the 1982–2000 period. Results reveal evidence that international capital inflows (FDI) are affected by fiscal policy at home and abroad. Also, there is evidence that domestic capital tax rates react: (i) positively to changes in capital tax rates in neighboring countries, and (ii) negatively to changes in public investment spending in neighboring countries. In contrast, strategic interdependence over public investment spending decisions is not established.

Keywords Capital mobility · Tax competition · Welfare

JEL Classification F02 · H2 · H4

1 Introduction

Policy interdependence across countries is the cornerstone of a recent policy debate focusing on fiscal competition among national governments. In the tax competition literature, the most popular branch of research in this area, national governments have been found to cut their tax rates to attract mobile factors (see, e.g., Wildasin 1988; Persson and Tabellini 1992). Similar incentives may be present in government spending decisions (see, e.g., Keen and Marchand 1997; Bayindir-Upmann 1998; Fuest 1995). In this case, national governments increase some categories of spending, like public investment, to

1The possibility that competition across national jurisdictions to attract capital results in inefficiently low tax rates and public good provision dates back to Oates (1972). However, the “benchmark tax competition model” was first articulated by Zodrow and Mieszkowski (1986) and Wilson (1986). For surveys of the international tax competition literature, see Wilson (1999), Wilson and Wildasin (2004), and Haufler (2001).
attract mobile factors.\textsuperscript{2} All of these are examples of non-cooperative, prisoner’s dilemma situations.

There is empirical support for these predictions.\textsuperscript{3} Focusing on OECD economies, Devereux et al. (2008) provide evidence that countries choose their tax rates on corporate profits in a strategic way. The same result is also shared by Besley et al. (2001), who estimate a wide set of tax reaction functions for OECD countries, and by Cassette and Paty (2008), who investigate the potential existence of strategic interactions between the former EU15 countries and the countries of Central and Eastern Europe regarding corporate tax rates. Redoano (2007), focusing on a set of both revenue and expenditure variables, concludes that countries interact over capital and income tax rates, as well as over some categories of public spending (e.g., education spending).

The present paper contributes to the literature in two ways. First, apart from solely estimating fiscal policy reaction functions, we proceed by estimating a Foreign Direct Investment (FDI) inflows equation. This gives us the opportunity to directly examine whether fiscal policy choices, at home and abroad, affect domestic capital inflows and, therefore, to illuminate the source of fiscal policy externalities among OECD economies. Second, we investigate strategic fiscal policy interdependence across national borders by examining not only whether domestic capital tax rates (public investment spending) react to changes in capital tax rates (public investment spending) in neighboring economies but in addition whether capital tax rates (public investment) react to changes in public investment spending (capital tax rates) abroad. In this way, we place the spotlight on an important issue not previously examined by the relevant literature. This is the potential strategic substitution between capital tax rates and public investment spending.\textsuperscript{4} Our dataset consists of a panel of [up to] 20 OECD countries over the period of 1982–2000.

Our main empirical findings are as follows. First, we confirm the existence of fiscal policy spillovers among OECD countries. Specifically, we verify that FDI inflows in a country are: (i) negatively related to the difference between domestic capital tax rates and foreign capital tax rates and (ii) positively related to the difference between domestic public investment spending and capital tax rates.

\textsuperscript{2}A large branch of the fiscal competition literature assumes that governments solely finance a residential public good that does not affect capital productivity. In these cases, even when international fiscal competition takes place via public spending (see, e.g., Wildasin 1988) the benchmark results of tax competition theory (i.e., inefficiently low capital tax rates and under-provision of a public good) do not change. Fuest (1995) and Bayindir-Upmann (1998) suggest that fundamental tax competition results (i.e., under-provision of a public good) may change crucially when the public good is assumed to directly affect the productivity of capital. Moreover, when both residential public goods and public inputs are provided, non-cooperative fiscal policy leads to a systematic bias toward public inputs (Keen and Marchand 1997).

\textsuperscript{3}The earliest paper in this literature, the study of Case et al. (1993) estimates a model of strategic interaction in expenditures among US state governments. Similar research has been conducted by Baicker (2005), who replicated Case et al. (1993) results by carrying out a similar exercise with different econometric techniques. On the taxation side, most of the existing empirical studies employ local level data and examine within country strategic interdependence, due to tax competition among states or provinces. Brueckner and Saavedra (2001), Brett and Pinkse (1997, 2000) estimate tax reaction functions focusing on property taxes for cities in the Boston metropolitan area (USA) and Canada, respectively, Hayashi and Boadway (2001), Karkalakos and Kotsogiannis (2007) examine provincial corporate income tax responses in Canada and Buettner (2001) carry out a similar exercise investigating local business taxes in Germany. Finally, Pitlik (2007) examines international policy diffusion as a potential source of policy liberalization among OECD economies by employing identical empirical methodology.

\textsuperscript{4}To our knowledge, this is the first study that examines cross instruments strategic interdependence. Previous studies have either focused strictly on tax reaction functions (see, e.g., Devereux et al. 2008; Cassette and Paty 2008) or estimate tax and government spending reaction functions (e.g., Case et al. 1993; Redoano 2007) without examining cross instrument fiscal competition.