# Foreign direct investment, tax competition and social expenditure

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## ARTICLE INFO

## ABSTRACT

The aim of this paper is to make a first step towards studying the role of social expenditure and its interaction with corporate taxation in determining the destination of foreign direct investment (FDI) flows. Using panel data for 18 OECD countries and measuring the extent of social welfare policies by the (public social expenditure)/GDP ratio, we find strong support for the conjecture that redistributive social welfare state policies are valued by multinationals as, for instance, they may signal a government's commitment to social stability.

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## 1. Introduction

This paper makes a first step towards studying the role of social expenditure and its interaction with corporate taxation in determining the direction of foreign direct investment (FDI).

Public debate surrounding the increasing role of multinationals (MNEs) in the world economy mostly focuses on the policy determinants of their location decisions. Whilst the positive theory of FDI has made significant leaps forward,[1] work on the role of policy has progressed slowly and has mostly focussed, in line with traditional theory of tax competition (Wilson, 1999), on the adverse effect of corporate taxation. A large part of the existing empirical literature seems to support the view that international differences in corporate taxation are important determinants of MNEs' location.[2] However, substantial cross-country diversity remains in government spending, transfers and taxation. Tax revenues as a percentage of GDP are on the rise in many OECD countries (OECD, 2006) and overall effective corporate tax burdens have not fallen in response to capital and trade liberalisation with reductions in statutory corporate income tax rates having typically been accompanied by a broadening of tax bases and a

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[1] A 'unified' framework for the positive theory of FDI has emerged that highlights the role of market access, trade and factor costs, factor endowments and scale economies in determining the location of MNEs. See Markusen (2002) and Barba Navaretti and Venables (2004).

[2] See for instance, Desai, Foley, and Hines (2002), Gropp and Kostial (2000), Grubert and Mutti (2000), Altshuler, Grubert, and Newlon (2001), Görg (2005) and Hines (1996). See Hines (1999) and Gordon and Hines (2002) for extensive reviews.

tightening of fiscal loopholes (Devereux, Griffith, & Klemm, 2002). More generally, inter-country differences in corporate tax treatments remain very large, casting doubt on the tax competition hypothesis.

These stylised facts suggest that economic globalisation may not have fundamentally challenged governments' policy autonomy[3] and that standard tax competition analyses may overstate the degree to which FDI is driven by relative tax-treatment considerations.[4] Importantly, FDI flows, while relatively liquid *ex-ante*, are characterised by significant immobility *ex-post*, thus entailing a long-lasting ownership stake in a host country. Hence, in addition to factors such as the 'thickness' of supplier markets, the cost and quality of local inputs, and the proximity and size of final markets, firms' perceptions about the host country's economic and social environment are key to their choice of location and investment decisions depend on the combination of taxation and the provision of public goods and services that host countries can offer *because of* taxation. An 'unfavourable' tax differential may then be associated with more and not less investment flowing into a country, if higher taxes are coupled with other long-lasting favourable conditions that improve the business environment.[5]

Contrary to conventional wisdom that regards it as detrimental to the attraction/retention of industry, we conjecture that social policy plays an important role in the Tiebout-type of 'public good/taxation' combinations that matter to investors. In a recent survey of MNEs, a 'stable social and political environment' was found to be the second most important 'very influential' factor (after market access and before the quality of infrastructures and quality of skilled staff) in determining the attractiveness of an investment location (Jensen, 2006). In this paper we explore empirically the proposition that social welfare state policies, by signalling government's commitment to social contentment and stability, are valued by multinationals. Using panel data for 18 high-income OECD countries and measuring the extent of social welfare policies by the (public social expenditure)/GDP ratio, we investigate whether the latter exerts any significant impact on FDI inflows, once all other determinants are accounted for, and find strong support for the above proposition. We explain our empirical work and provide the estimation results in Section 2 and give our concluding remarks in Section 3.

## 2. Estimating the impact of social expenditure on FDI

We begin by estimating an equation which, in addition to the other typical explanatory variables, uses the relevant proxies for taxation and social expenditure, and the interaction between them, as the main regressors determining the inflow of FDI. More specifically, let the general regression equation be

$$y_{it} = \alpha x_{it} + \beta z_{it} + \gamma(x_{it} \cdot z_{it}) + \delta' w_{it} + \varepsilon_{it}, \tag{1}$$

where, for a host country $i$ in year $t$, $y_{it}$ is the (logarithm of real) inflow of FDI; $x_{it}$ is the share of social expenditure in GDP; $z_{it}$ is the effective marginal tax rate;[6] and $w_{it}$ is a vector of the conditioning variables that are usually used is the literature.[7] Social expenditure refers to the bulk of what is normally defined as the welfare state, i.e. publicly financed health and social protection.[8] In this study, the main control variables that we include in $w_{it}$ are:[9] (1) The logarithms of real GDP and population (GDP and POP) which are expected to positively affect FDI as they capture the host country's market size, relevant to market-seeking MNEs. (2) Unit labour cost and the cost of capital (ULC and CC), capturing cost and relative factor endowment considerations and thus expected to have a negative effect on inward FDI. (3) A measure of openness (OPEN, measured by trade/GDP ratio), used as a proxy for trade barriers and trade costs. The effect of OPEN will ultimately depend on whether FDI is a complement or a substitute to trade: a higher trade openness should be more attractive to export-seeking MNEs, but may reduce the attractiveness to horizontal, market-seeking, FDI. (4) The real effective exchange rate (REER, defined such that an increase is depreciation), whose effect is a priori ambiguous: as a measure of host country competitiveness, particularly important for export-platform FDI, it is expected to have a positive effect on FDI, but it could have a negative effect on FDI to the extent that a weak currency reduces the value of investments and of repatriated profits. (5) A number of 'policy' variables, relevant if we believe that MNEs are *ceteris paribus* likely to favour locations that offer a market-friendly and stable macroeconomic environment: (i) the share of public consumption in GDP (GC), capturing the size of the government and expected to have a negative effect on FDI since, other things equal, MNEs are likely to prefer 'leaner' governments; (ii) inflation (INF), expected to have a negative effect on inward FDI as it could reflect a 'wet' government; (iii) an index of infrastructure (INFRA), expected to have a positive impact on inward FDI since it facilitates operations.

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[3] Dreher (2006) finds that globalisation did not 'decrease leeway for independent national economic policy'.

[4] The effects of corporate taxation may be low particularly for FDI driven by market access considerations (Mutti & Grubert, 2004). See Andersson and Forslid (2003) and Baldwin and Krugman (2004) for analyses of how governments, via taxation, can appropriate rents accruing to mobile factors from agglomeration economies.

[5] Political scientists have recently examined the role of 'market-friendly' political institutions and policies in determining FDI flows. See for instance Mosley (2003) and Jensen (2006).

[6] The economics literature distinguishes between two slightly different concepts of the effective tax rate: the effective *marginal* (EMTR) and effective *average* (EATR) tax rates. When it comes to examining the effects of corporate tax rates on the activities of MNEs, Devereux et al. (2002) argue that the EATR is the relevant tax rate in determining *discrete investment choices* (i.e., whether to invest or export) as the average return to capital is what matters for this decision. By contrast, the EMTR is relevant for firms' decisions about the *level of investment*, as it affects the net marginal return to capital. Hence, the use of the EMTR seems appropriate in our context. However, it should also be noted that while we have some data on EATR the coverage is by no means as extensive as for the EMTR and the use of the former would hence limit our analysis severely. Still, we find that for those cases for which we have both EATR and EMTR, these two rates are highly positively correlated.

[7] See Blonigen (2005) for a recent survey on the determinants of FDI flows.

[8] The latter includes expenditure on: active labour market policies; disability and family cash benefits, family services, housing, occupational injury, old age cash benefits, other contingencies, services for elderly and disabled, sickness benefits, survivors, unemployment benefits.

[9] A detailed data appendix can be found in Görg, Molana, and Montagna (2007).