ELSEVIER

Journal of Public Economics 90 (2006) 1007–1025

JOURNAL OF PUBLIC ECONOMICS

www.elsevier.com/locate/econbase

Tax incidence, majority voting and capital market integration

Ben Lockwood [a,*], Miltiadis Makris [b,c,d]

[a] Department of Economics and CSGR, University of Warwick, UK
[b] Department of Economics, University of Exeter, UK
[c] CMPO, University of Bristol, UK
[d] IEPS-EMOP, Athens University of Economics and Business, Greece

Received 4 July 2004; received in revised form 28 June 2005; accepted 29 June 2005
Available online 4 November 2005

Abstract

We re-examine, from a political economy perspective, the standard view that higher capital mobility results in lower capital taxes — a view, in fact, that is not confirmed by the available empirical evidence. We show that when a small economy is opened to capital mobility, the change of incidence of a tax on capital–from capital owners to owners of the immobile factor–may interact in such a way with political decision-making so as to cause a *rise* in the equilibrium tax. This can happen whether or not the immobile factor (labour) can be taxed, and whether or not savings can be subsided under capital mobility.

Keywords: Capital tax competition; Capital market integration; Majority voting; Tax incidence

1. Introduction

In spite of the now large literature on capital tax competition, there have been relatively few systematic analyses of the interaction between the level of tax competition and the political process by which taxes are chosen. An early and important exception[1] is Persson and Tabellini (1992) – henceforth PT – who stress that with tax competition, voters in a country generally vote strategically by choosing a candidate who, once in office, will tax capital more than the median voter would. In their model, such a candidate has less than the median endowment of capital i.e.

* Corresponding author.
E-mail address: b.lockwood@warwick.ac.uk (B. Lockwood).
[1] Other, more recent contributions are discussed in Section 5.

0047-2727/$ - see front matter © 2005 Published by Elsevier B.V.
doi:10.1016/j.jpubeco.2005.06.005

is poorer. Via this strategic delegation, the voters precommit to a higher tax rate, thus counteracting the ex post incentive of the policy-maker, once in office, to under-tax capital. So, intensification of tax competition, due to increased capital mobility (capital market integration, CMI), will also induce a change in to a more pro-tax candidate.

In this paper, we identify a rather different interaction between changes in CMI and the political process. This works through the impact that CMI has on the *incidence* of the tax on capital. Unlike PT, this effect does not require representative democracy or strategic behavior by countries. Indeed, in our model, countries are small and democracy is direct. Nevertheless, the effect of this interaction is quite striking: under empirically quite plausible conditions, the equilibrium tax on capital can *rise* following CMI, in contrast to the standard conclusion that taxes are lower in economies open to capital mobility.[2]

The key feature of our model is that (unlike PT) there are two factors of production in every country, one internationally immobile (labour) and one possibly internationally mobile (capital), and the before-tax prices of factors are not fixed. Indeed, our model is simply the standard Zodrow and Mieszkowski (1986) one, but where agents in any country are allowed to be completely heterogeneous in their labour and capital endowments, and also their preferences over the public good.[3] Decisions over tax rates are made by majority voting.

Consider the simplest case, where the only tax instrument is a capital tax and all voters value the public good equally. Then, in our model, following capital market integration, the *incidence of the capital tax changes*: the burden of the tax shifts from owners of capital to owners of labour. As agents within a given country are heterogenous, the change in the incidence of the capital tax, following CMI, will generally cause a change in the attitude of the median voter toward taxation (and may also change the identity of the median voter—but this is not crucial).

Specifically, without capital mobility, owners of capital bear the entire burden of the tax; the after-tax price of capital decreases by the full amount of the tax, while the wage is fixed by the level of inelastically supplied capital.[4] So, any voter's marginal contribution to the cost of public good provision is proportional to his *capital* endowment. This implies that the median voter in the closed economy (i.e., the voter whose ideal tax and level of public good provision is the median one in the population) is the owner of the median capital endowment. So, in the closed economy, in equilibrium, the tax will be determined by the size of the median capital endowment.

With capital mobility, instead, the entire burden of the tax is shifted to owners of the immobile factor of production (labour), as each country is small and takes the after-tax price of capital as given. So, now, any voter's marginal contribution to the cost of public good provision is proportional to his *labour* endowment. So, the median voter in the open economy case is the owner of the median labour endowment, and the equilibrium tax is thus determined by the size of the median labour endowment.[5]

[2] It is worth noting that in the PT model, although the strategic delegation effect works in to raise taxes following CMI, in the symmetric equilibrium that they analyse, it never fully offsets the basic economic effect of CMI which is to lower the equilibrium tax.

[3] Our results therefore also extend in various ways (fully explained in Section 6) the many papers that use this model.

[4] The case where capital endowments are determined by an endogenous savings decision and thus may be price-elastic is considered in Section 5 below.

[5] Note that these may in fact be different agents, so we may have a shifting median voter. However, as argued below, the shifting median voter per se does not drive our results.