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Public education under capital mobility

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Abstract

The paper considers a two-country model of overlapping generations economies with intergenerational transfers motivated by altruism and investment in human capital. We examine in a non-stationary competitive equilibrium the optimal provision of education with and without capital market integration. First, we explore how regimes of education provision—public, private or mixed—arise and how they affect the dynamics of autarkic economies. Second, we study the effects of capital market integration, in equilibrium, on the optimal provision of education. Third, we show that capital market integration enhances government intervention in the provision of public education (to improve the welfare of its constituents) and consider various solutions to such a competition.

JEL classification: D9; E2; F2; J2

Keywords: Altruism; Education; Growth; Human capital; Capital market integration

1. Introduction

Trends manifested during the 1990s suggest a worldwide acceleration in the flows of foreign direct and portfolio investments. International production has become a significant element in the world economy and substantial flows of foreign investments to emerging markets is a recent phenomenon dating only from the beginning of last decade. This would not have been possible if it

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were not for the ongoing integration of international capital markets (see, e.g., UNCTAD, 1997). The increased mobility of capital coincided with the growing recognition that economies have come to revolve around the production and the use of knowledge. With the continuous upskilling of jobs, investment in education has become a high priority of many developed and developing countries. But does capital mobility enhance public investment in education? This paper seeks to study how international capital market integration (CMI) affects investment in education by households and government.

This paper integrates few main features in the recent literature on endogenous growth. Investments in human capital are used as an engine for growth (see, e.g., Lucas, 1988; Azariadis and Drazen, 1990; van Marrewijk, 1999). Public education is provided by governments, although private provision of education exists, in order to foster growth (see, e.g., Glomm and Ravikumar, 1992; Eckstein and Zilcha, 1994). Various aspects of the role of capital market integration in enhancing economic activity have been studied (see, e.g., Barro et al., 1995; Buiter, 1981; Dellas and de Vries, 1995; Leiderman and Razin, 1994; Rivera-Batiz and Romer, 1991; Ruffin and Yoon, 1993; Ruffin, 1985; Stokey, 1996). Our model in a steady state can be viewed as an AK-type endogenous growth model where A is proportional to the long-run capital–labor ratio. However, we shall consider mainly the transition path and *non-stationary* competitive equilibria.

The theoretical literature in public economics and international trade has devoted a significant amount of attention to issues concerning tax competition between governments and the provision of public goods. In a model with international capital mobility, Buiter and Kletzer (1995) study the issue of education and domestic capital market imperfection. In a closed economy, Lin (1998) examines an OLG model in which the young generations invest in their own education. Gradstein and Justman (1995) consider an economy where individuals (over-) invest in their own human capital accumulation for the purpose of attracting foreign capital. In a trade model, Wilson (1987) obtains that a tax on mobile capital can cause an inefficient distribution of public goods across regions because of the positive and negative externalities linked to investment inflows and outflows. In our framework, local governments finance public education by taxing labor earnings, the immobile factor, and therefore allow for the implementation of an efficient zoning policy. Also, individuals do not invest in their own human capital. With compulsory schooling in mind, it seems that the acts of training and the allocation of resources are not fully decided by the young generations.

The specific model we analyze is as follows. We consider a two-country economy with overlapping generations, identical households (in each generation) in both countries. Parents care about their offspring's income, hence we observe intergenerational resource transfers to the young (gift-bequest motive) *and* investment in her/his human capital. Education to the young