ELSEVIER

Journal of Public Economics 88 (2003) 113–129

JOURNAL OF PUBLIC ECONOMICS

www.elsevier.com/locate/econbase

# Does international coordination of pension policies boost capital accumulation?

Luca Beltrametti[a,*], Luigi Bonatti[b]

[a] *Dipartimento di Economia e Metodi Quantitativi, Università di Genova, Via Vivaldi 2, 16126 Genova, Italy*
[b] *Dipartimento di Economia, Università di Trento, Via Inama 5, 38100 Trento, Italy*

Received 16 March 2001; received in revised form 13 February 2002; accepted 20 February 2002

**Abstract**

Within an OLG framework we study a perfectly balanced Pay-As-You-Go (PAYG) pension scheme: in spite of its depressive impact on national saving, PAYG is implemented for operating intergenerational transfers. With international capital mobility, the national adoption of PAYG determines a spill-over effect through the world capital stock. This creates a situation of interdependence among national pension policies, that we model as a $n$-countries dynamic game. In contrast with previous literature, it is shown that in general the international coordination of pension policies does not boost world savings and capital accumulation.
© 2002 Elsevier B.V. All rights reserved.

*JEL classification:* E21; F42; H55

*Keywords:* Social security; Policy coordination; Capital formation; Saving

## 1. Introduction

It was recently argued that the international coordination of national pension policies tends to reduce the intergenerational transfers operated through Pay-As-You-Go pension systems (PAYG), thus boosting world savings and capital accumulation (Pemberton, 1999). We claim that, in general, this is not true: the purpose of this paper is to model the international spill-over effects of national pension policies in a standard overlapping generations setting (OLG), showing that only under implausible assumptions about the

* Corresponding author.
*E-mail addresses:* beltrame@economia.unige.it (L. Beltrametti), lbonatti@risc1.gelso.unitn.it (L. Bonatti).

0047-2727/$ - see front matter © 2002 Elsevier B.V. All rights reserved.
doi:10.1016/S0047-2727(02)00080-4

authorities' objectives the international coordination of these policies leads to a higher steady-state stock of capital.

In this work we take as given the joint operation of both a PAYG and a fully funded pension scheme (purely voluntary savings for retirement purposes)[1] in most industrial countries. A possible reason for the implementation of PAYG is that it is used to redistribute income among living generations: a system which can be viewed as the result of some political process aimed at building social consensus. As individuals display no intergenerational altruism, it is realistic to assume that the policy makers managing national pension schemes care only about the living generations' welfare. In accordance with this view, in the OLG model presented in this paper, we attribute to the national authorities a welfare function that also reflects the way in which the consumption possibilities are distributed among living individuals belonging to different cohorts.

Consistently with the prevailing econometric evidence suggesting that PAYG pension schemes depress national saving,[2] we model a situation in which national pension policies affect the country's saving rate, thus exerting some impact on the world capital stock even if the current budget of the public pension scheme is always perfectly balanced. In this context, one could argue that the operation of PAYG schemes would excessively depress world capital formation if each country decided its pension policy in full autonomy, since the capital available for productive investment within each country with full access to the world capital market only marginally depends on its national saving rate. Indeed, this is the conclusion reached by Pemberton (1999, 2000).[3] In reality, this is not generally true: for the case in which the pension authorities care only about the welfare of the living generations we show that the international coordination of pension policies pushes upward the world interest rate.

The intuition underlying our conclusion relies on the channels through which each country's pension policy can exert an influence on other countries' welfare. Indeed, as a country raises its social security taxes to finance higher pension benefits to its old-age citizens, we have three different effects on the welfare of the young generation: (i) a direct depressive effect on the disposable (after-social security tax) labor income of the young generation; (ii) an indirect depressive effect on future wages—due to the lower capital stock—that reduces future pension benefits financed through social security taxes; (iii) an indirect boosting effect on the rate of return on assets that increases the yield obtainable on

[1] By 'fully funded' pension scheme we mean an institutional set-up in which households can freely determine the amount of their saving for retirement earning the market interest rate. For 'laissez-faire' regime, we mean an institutional set-up in which no mandatory social security system exists and individuals rely solely on 'fully funded' pension schemes.

[2] See Feldstein (1974, 1996).

[3] Previous literature addressing the effects of national pension policies in the context of an internationally integrated capital market (see, e.g. Breyer and Wildasin, 1993) either deals with small open economies that take the world interest rate as given or with large open economies but within a static partial equilibrium framework. Moreover, our discussion about the coordination of pension policies is based upon arguments that differ from those considered in that literature on the international effects of pension systems, which highlights the labor market distortion arising from different social security legislation (see, e.g. Homburg and Richter, 1993; Breyer and Kolmar, 1995).

دریافت فوری ← متن کامل مقاله

ISIArticles
مرجع مقالات تخصصی ایران

- ✓ امکان دانلود نسخه تمام متن مقالات انگلیسی
- ✓ امکان دانلود نسخه ترجمه شده مقالات
- ✓ پذیرش سفارش ترجمه تخصصی
- ✓ امکان جستجو در آرشیو جامعی از صدها موضوع و هزاران مقاله
- ✓ امکان دانلود رایگان ۲ صفحه اول هر مقاله
- ✓ امکان پرداخت اینترنتی با کلیه کارت های عضو شتاب
- ✓ دانلود فوری مقاله پس از پرداخت آنلاین
- ✓ پشتیبانی کامل خرید با بهره مندی از سیستم هوشمند رهگیری سفارشات