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Incentive effects of social security on labor force participation: evidence in Germany and across Europe

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Abstract

All across Europe, old age labor force participation has declined dramatically during the last decades. This secular trend coincides with population aging. The European social security systems therefore face a double threat: Retirees receive pensions for a longer time while there are less workers per retiree to shoulder the financial burden of the pension systems. This paper shows that a significant part of this problem is homemade: most European pension systems provide strong incentives to retire early. The correlation between the force of these incentives with old age labor force participation is strongly negative. The paper provides qualitative and econometric evidence for the strength of the incentive effects on old age labor supply across Europe and for the German public pension program.

Keywords: Labor force participation; Social security; Incentive; Pensions

1. Introduction

Pay-as-you-go (PAYG) systems dominate the old age social security programs in Europe. French, German and Italian workers rely almost exclusively on pensions financed by a PAYG system, while the Netherlands and Great Britain are exceptions in funding a substantial fraction of their future pension benefits. In the Netherlands, defined benefit plans dominate. As has been stressed quite frequently (OECD, 1988), the population aging process puts all pension systems under severe

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strain, but particularly defined benefit plans and most dramatically the pay-as-you-go pension systems.

At the same time, European old age labor force participation rates have declined substantially and are relatively low compared to the United States and Japan, see Fig. 1.

The decline in old age labor force participation is very pronounced in Belgium, Italy, France, the Netherlands, and Germany. All of the European countries in Fig. 1 have old age labor force participation rates below Japan, and only Sweden is above the U.S. The decline in old age labor force participation amplifies the problems of financing social security in times of population aging because it implies more recipients and less contributors.

A recent volume edited by Gruber and Wise (1998) argues that the declining old age labor force is strongly correlated with the incentives created by generous early retirement provisions. Unlike defined contribution plans in funded pension systems, pay-as-you-go systems are intrinsically difficult to design in a fashion that is actuarially fair. Moreover, the early retirement provisions in most European pension systems increase this actuarial unfairness for those who retire normally or late. Pension wealth is actually decreasing when retirement is postponed past the early retirement age in all countries depicted in Fig. 1. In their summary article, Gruber and Wise (1998) estimate the international correlation between aggregate measures of old age labor force participation and early retirement incentives. Fig.

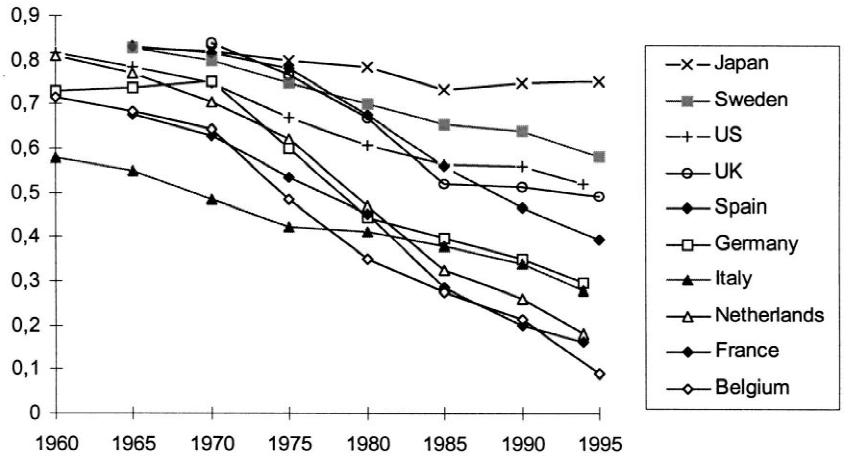

Fig. 1. Old age labor force participation in Europe, U.S. and Japan, 1960–1995. Note: labor force participation rates of men aged 60–64. Sources: Belgium: Pestieau and Stjins (1998); France: Blanchet and Pelé (1998); Germany: Börsch-Supan and Schnabel (1998b); Italy: Brugiavini (1998); Japan: Oshio and Yashiro (1998); Netherlands: Kapteyn and de Vos (1998); Spain: Boldrin et al. (1998); Sweden: Palme and Svensson (1998); UK: Blundell and Johnson (1998); U.S.: Diamond and Gruber (1997).