The Effect of Social Security on Saving: The Case of Belgium with a Particular Emphasis on the Behavior of the Aged

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Abstract: Based on a consumer expenditure function estimated with Belgian time series data, this paper analyses the impact of social security on personal saving. It shows that social security has a depressive effect, mainly by affecting the saving behavior of the aged.

The past decade has seen a continuing debate on whether the social security pension system reduces private saving and capital formation. The discussion started in the U.S. but quickly several other countries were caught up in it.

The purpose of this paper is first to extend this line of research to the case of Belgium and thus to test the effect of social security on the saving of Belgian households. The second aim of the paper is to focus on the distinction between the working and the aged population, that is between those who contribute and those who benefit from social insurance. Clearly, introduction and liberalization of pensions financed from contemporaneous mandatory savings is not likely to have the same effect on those two categories.

The paper is organized in the following manner. Section 1 provides a brief review of the literature. Section 2 presents the empirical findings on the effect of changes in social security wealth on Belgian consumer expenditures. In Section 3, the distinction between the social security wealth of the workers and that of the aged is introduced and their relative impact on saving is tested and interpreted.

1) This paper was presented at the I.S.P.E. – N.B.E.R. Conference on Taxation of Capital and Savings in Paris, 1981. The authors are grateful to the conference participants, to Victor Ginsburgh and the referees of this Journal for their suggestions.

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3) In Belgium public pensions account for about 40% of total social security benefits [for a good survey, see Kessler/Massen/Strauss-Kahn].
1. A Survey of the Different Positions

From the impressive number of studies on the effect of social security on saving, one can hardly draw any firm and straightforward conclusion. Actually, four major positions can be distinguished within the literature.

1. Social security does indeed decrease private savings and thus capital formation. [Feldstein, 1974, 1981].

2. Social security does not affect private savings. This position can be defended on different grounds:
   - the induced retirement effect offsets the asset replacement effect. [Modigliani/Sterling; Kurz].
   - the consumers-savers have a dynastic cross-generation view. [Barro, 1974].
   - both the workers and the pensioners are liquidity-constrained so that a social security increase leads the first to save and the second to consume the same additional amount. [Dolde/Tobin].

3. It is impossible to decide one way or another on the basis of the currently available data. [Esposito].

4. Because of the complexity of any realistic macro-model, it has been impossible so far to test the true effect of social security on saving and even more so, on capital accumulation [Dolde/Tobin; Eisner].

A key feature which has been ignored in most of the literature is that the period covered is one of inauguration, extension, liberalization of social insurance. It is thus a period of disequilibrium and of adjustment during which, among other effects, the pensioners had little or nothing to pay in the system.

The incidence of public policies such as an increase in both contributions and benefits of social insurance can be viewed in two ways: by examining changes in the behaviour of transition cohorts or by focusing on cohorts living in the distant future when the economy converges towards a new steady state. As recently noted by Auerbach/Kotlikoff [1980], in most studies of implications of government policy little attention has been paid to the state of generations alive during the transition to a steady state. This point is the basis of our distinction between the working and the aged population. But first, we turn to a test of the basic Feldstein equation for Belgium.

2. Social Security and Private Saving in Belgium

Our study uses aggregate Belgian time series data for the period 1954—1977. The basic equation is:

\[ C_t = a + b_1 YD_t + b_2 YD_{t-1} + b_3 W_{t-1} + b_4 SSW_t + b_5 CG_t + u_t \]  

(1)

4) They indeed show within their simulation model that the impact of most fiscal policies is quite more important when it is just felt than after a period of adjustment and of return to a new equilibrium.