

Notional Defined Contribution Pension Systems in a Stochastic Context: Design and Stability

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Policy Abstract

Around the world, Pay-As-You-Go (PAYGO) public pension programs face serious long-term fiscal problems due primarily to actual and projected population aging, and most appear unsustainable as currently structured. Some have proposed the replacement of such plans with systems of fully funded private or personal Defined Contribution (DC) accounts, but the difficulties of transition to funded systems have limited their implementation. Recently, a new variety of public pension program known as “Notional Defined Contribution” or “Non-financial Defined Contribution” (NDC) has been created, with the objectives of addressing the fiscal instability of traditional plans and mimicking the characteristics of funded DC plans while retaining PAYGO finance. Using different versions of the system recently adopted in Sweden, calibrated to US demographic and economic parameters, this study evaluates the success of the NDC approach in achieving fiscal stability in a stochastic context. The study finds that the basic NDC scheme is effective at preventing excessive debt accumulation, but does little to prevent significant asset accumulation along many trajectories and on average. With adjustment, however, the NDC approach can be made more stable.