

**Risks and Income Adequacy for the Individual in a Notional Defined Contribution Setting-
-the Interaction of Public Pensions, Public Cash Benefits to the Elderly and Occupational
Pensions--the Case of Sweden**

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Pension systems can be organized in numerous ways: pay-as-you-go vs. funded; defined-benefit vs. defined-contribution; with or without a tight connection between contributions and benefits; indexing by prices, growth or return in the capital market. Depending on the choices made and the mix between them, a pension system is, to different degrees exposed, to different risks. These risks can be economic, demographic and political. The entire Swedish pension system portfolio exhibits a large number of the above mentioned features. In this paper we analyse how different design features expose a pension system to risk using the Swedish system as an example. Does a specific combination of design features reduce overall risk or do they instead interact in a risk-increasing manner? In recent years the world has been introduced to new tools such as financial automatic balancing and notional defined contribution schemes as ways to prepare for an ageing society. It has been natural to focus on these new concepts. The effect of these concepts, however, cannot be separated from the broader pension picture (see enclosed figure). This paper aims to take a broader look at the entire pension picture in Sweden and addresses the complex interactions of public pensions (income pension, premium pension and guarantee pension), occupational pensions and transfers to the elderly (housing supplement) as well as the risks involved in each scheme.

Keywords: Risk, Pay-As-You-Go financing, notional defined contribution, occupational pensions, defined benefit, defined contribution, cash benefits to the elderly