

Actuarial Measures of Pension-Related Compensation and Wealth of US Households

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By Marshall Reinsdorf and David Lenze

US Bureau of Economic Analysis

Washington DC 20212

Email address of corresponding author: Marshall.Reinsdorf@BEA.gov

In the US national accounts, compensation income to households from defined benefit (DB) pension plans is currently measured by employer contributions to plan trust funds, and investment income from these plans is measured by the interest and dividend income received by the trust funds. Supplementary information is also provided on benefit payments by these plans.

In a theoretical model where all expectations are exactly realized and where employers keep their plans fully funded at all times, employer contributions match the actuarial value of the benefits earned through service, so contributions are indeed a satisfactory measure of pension-related compensation. This theoretical ideal is far from what occurs in actual practice, however. Because of factors such as holding gains and losses on plans assets, weak or non-existent penalties for delaying contributions, differences between actuarial assumptions and outcomes, and changes in plan features, employer contributions are often lumpy, creating specious jumps and dips in official measures of household income. Therefore an actuarial measure of the expected present value of benefit rights earned would provide a more meaningful measure of pension-related compensation than employers' cash contributions to plan trust funds. In addition, actuarial estimates of pension plans' liabilities to participant provide important information on a component of household wealth. Finally, estimates of the unfunded portion of this liability provide important information on the sustainability of the pension scheme in the absence of changes in contribution rates or benefit formula.

In this paper we develop the first set of actuarial estimates of DB pension-related compensation for the US, along with estimates of plans' actuarial liabilities and funding status. The sheer number of DB plans in existence is one of the challenges in developing these estimates, with over 40,000 private plans, hundreds of plans for state and local government employees, and 40 plans for employees of the Federal government or Federal government enterprises. We then ask how the actuarial estimates change the official picture of household income and saving behavior, and what they imply about the role of pension plans in the behavior of the personal saving rate and personal consumption. Falling saving by DB pension plans is part of the story of the decline in the US personal saving rate to below zero, but actuarial measures are needed to assess the extent to which the fall in saving by DB pension plans can be attributed to the maturing of these plans as the covered population ages. We also consider the sustainability of the current contribution and benefit policies of various DB pension schemes, and the possible effect on household wealth and retirement security of the shift that is occurring in the US away from DB pension plans in favor of defined contribution pension plans.