

Title: Benefit Rules for Social Security Schemes: A Portfolio Approach

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Abstract: Pay-as-you-go (PAYG) pension schemes can contribute to better intergenerational risk-sharing and, in combination with funded pensions, to a beneficial diversification of the risks of old-age consumption. However, different PAYG variants entail different properties in these respects. In a 2-OLG model with stochastic technology shocks we analyze and compare the PAYG policies of keeping the contribution rate fixed or fixing replacement rate. We find: (i) If technology shocks are Hicks-neutral FC schemes do not entail any diversification effects as compared to private savings. (ii) In the short-run, FR pension scheme induce a higher capital shock than FC schemes. Furthermore, the utility levels are also higher under the former than under the latter scheme. (iii) In the long run, both schemes are in general non-comparable.

JEL classification: C62, H55, O41

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