Macroeconomic and Welfare Implications of Different Pension Benefit Arrangements

Nicoleta Ciurilă

Discussion by Yang Jiang

Utrecht 2016.14.10

Summary

- If we abstract from general equilibirum effects
  - The FL pension system is better at low levels of contributions because of the income insurance effects.
  - The NDC pension system is better at high levels of contributions because of less labor supply distortions.
- If we include general equilibrium effects
  - A higher distortion on labor supply implies a lower distortion on savings. Since the FL system distorts savings less, it may be more desirable under any level of contributions.

Model

- Households

$$\max u(c_t^y) + \beta \mathbf{E} u(c_{t+1}^o(z), l_{t+1}^o(z))$$

subject to

$$c_t^y + a_t = w_t z(1 - \tau_t)$$
$$c_{t+1}^o(z) = a_t(1 + r_{t+1}) + w_{t+1} z l_{t+1}^o(z)(1 - \tau_{t+1}) + b_{t+1}(z)$$
$$l_{t+1}^o \in [0, 1)$$

FL VS NDC

- Under the Flat Benefit system,

$$\frac{-u_l(c^o_{t+1}(z), l^o_{t+1}(z))}{u_c(c^o_{t+1}(z), l^o_{t+1}(z))} = w_{t+1}z(1-\tau_{t+1})$$

- Under the Notional Defined Contribution system,

$$\frac{-u_l(c^o_{t+1}(z), l^o_{t+1}(z))}{u_c(c^o_{t+1}(z), l^o_{t+1}(z))} = w_{t+1}z$$

Comment

- You assume that agents have the same earnings $w\bar{z}$ when young. In the model the young agents have idiosyncratic earnings risk $w_t z$.
- Does FL pension system reduces idiosyncratic earnings risk or does it reduces income inequality?
- How do you define old age? If it is after retirement (age 65), your income after retirement is not subject to the pension tax; if it is before retirement (age 55), I wonder why the FL pension system doesn't distort your labor supply before the age 55.

Comment

- All results are obtained under Assumption 1 ($\delta = 1, \sigma = 1, A_t = A$). How important is Assumption 1? Are the results robust to other settings?
- With heterogeneous wage income, I would assume that FL pension transfers wealth from high income individuals to low income individuals. It is not welfare improving for everyone.
- You mentioned that the NDC pension system in Germany, Italy, France and Poland are explained by the lower labor supply distortions. This comes from the partial equilibrium analysis (r, k are fixed). Are these countries small open economies?