

Macroeconomic and Welfare Implications of Different Pension Benefit Arrangements

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Summary

- FL: same benefits regardless of previous contributions
- NDC: benefits are perfectly linked to previous contributions
- If we abstract from general equilibrium 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

$$V(x) = \max_{c(x), l(x), a'(x)} u(c(x), l(x)) + \beta s_{j+1} V(x')$$

subject to

$$c(x)(1 + \tau_c) + a'(x) = a(1 + r(1 - \tau_k)) + \text{netw}(x)$$

$$a'(x) \geq 0$$

$$l(x) \in [0, 1]$$



Model

- Net labor income

$$netw(x) = w\bar{h}zk_jl(x)(1 - \tau - \tau_l) + TL$$

- k_j : a deterministic component of the wage which depends on age j . How do you determine k_j ?
- TL : lump sum transfer

$$\tau_c C + \tau_l L + \tau_k rK + Beq = G + TL$$

- Accidental bequests are transferred to the same generation?



Model

- Pension system:

$$\text{NDC} \quad b(j, p) = p/s_{ret}$$

$$\text{FL} \quad b(j, p) = b$$

- The pension income does not enter the agent's budget constraint?
- How does the agent withdraw their pension income after retirement?
- How is flat benefit b determined in the model if agents do not build pension claims?

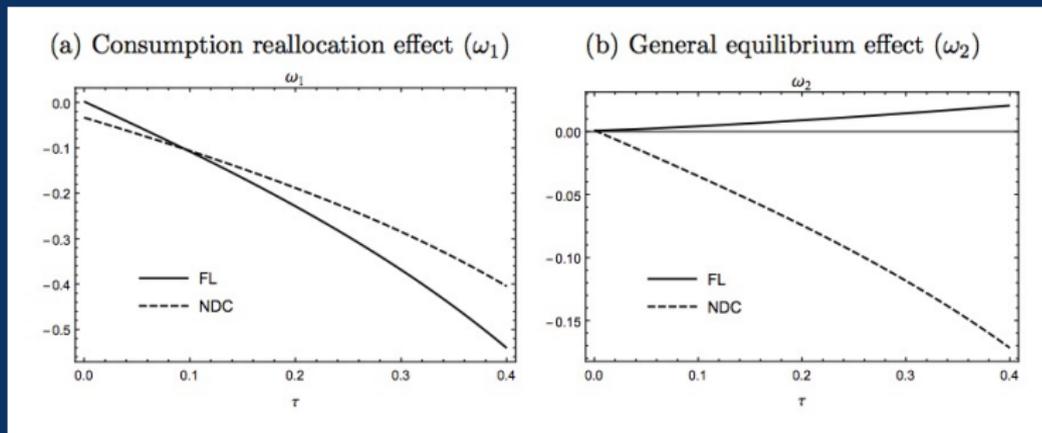


Two-period Model

- In the multi-period model you assume that $T=80$. In the two period model you assume that each period is 30 years
- No lifetime uncertainty, no accidental bequests, no government spending, no deterministic component of the wage that depends on age, no consumption tax or capital tax
- The two-period model is much more simplified than the multi-period model. To what extent do the propositions derived from the two-period model apply to the multi-period model?

Simulation—two period model

- Simulation results from two-period model



Simulation–multi period model

- I couldn't find how k_j is determined
- There are no axis labels on the graphs
- There are no tables or graphs for the welfare of agents under different pension systems with different contribution rates
- I am expecting the author to replicate the graph above in the multi-period model

Comments

- You seem to mix policy implications with empirical evidence. Countries with a big pension system (Germany, France, etc.) switched to NDC while countries with a small system (UK) switched to FL is empirical evidence of your theory in partial equilibrium analysis
- Since you find that FL is welfare improving than NDC due to general equilibrium effects, the policy implication of this paper is that all countries with NDC should switch to FL regardless of the size of the pension system
- However, I don't think FL will be welfare improving for everyone, as it redistributes wealth from high income to low income agents, which is why NDC is introduced in the first place. But this paper does not model income heterogeneity

