

Economic Effects of Public Pension System

*Comments on “Reducing the Coverage Gap” (Piggott and Lu),
and on “Social Pensions, Savings and Labor Supply” (Robalino)*

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General discussion

Economic Effects of Public Pension System

- Savings and retirement decision
 - Income effect
 - Consumption and leisure choice (from the effect on permanent income)
 - Relative Price
 - Within period substitution (consumption and leisure choice)
 - Intertemporal substitution
 - Human Capital Investment
- Net Pension Debt
 - Crowding out of capital
 - Even if private saving remains unchanged, national saving will be reduced under unfunded pension system
- Failure of Annuity Market
 - Public Pension System reduce the uncertainty of longevity

Generational Accounting

- Intertemporal Budget Constraint of Government
- $B = T + F$
 - B: present value of future benefit = $B_p + B_f$
 - T: present value of future contribution or tax
 - F: pension fund
- $B_p + B_f = T + F$
 - B_p : present value of future benefit related to past contribution
 - B_f : unrelated to past contribution
- $B_p - F = T - B_f$
 - $B_p - F$: net pension debt
 - Net pension debt must be financed from future surplus ($T - B_f$)
- Equivalence of pension debt and ordinal public debt
 - Adverse effects of capital accumulation

Income and substitution effect

- Different Income Effects
 - Positive Income Effect on Current old age generation
 - Negative Income Effect on Current working generation and future generation
 - Intertemporal government budget constraint
 - Zero sum nature of income transfer
 - Under unfunded system future generation may reduce private savings but national savings will be smaller
- Social security contribution works as a tax if relation between future benefit and contribution is weak
 - Individual account
- Some kind of restriction on benefit (eligibility, means test, ...) works as a (non linear) tax on labor supply of the elderly

Comments on “Reducing Coverage Gap” (Piggott and Lu)

- China will face large unfunded liability
- Increasing coverage is important to both urban and rural workers
- Targeted social pension system is a relatively cheap way for
 - closing coverage gap
 - controlling the pension debt
- I almost agree with the above conclusion
- How about alternative plan
 - Individual account (NDC)
 - Funded system

Comments on “Social Pensions, Savings and Labor Supply” (Robalino)

- Conclusion of Mr. Robalino’s paper
 - Indirect cost is large
 - mainly related to labor supply effect
 - Distortion is relatively small
 - Reduction of asset in working period
- How about crowding out effect
 - general equilibrium effect (in closed economy)
 - Reducing asset → reducing capital
 - Reducing GDP
 - Reducing wage, and utility of workers