Rotten Parents and Disciplined Children: A Politico-Economic Theory of Public Expenditures and Debt by Zilibotti-Song-Storesletten

Discussion by

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Intergenerational Conflict and Public Debt

- Public finance work on static, compositional effects of intergenerational conflict on public spending (e.g. Poterba 1996). This paper focuses on inter-temporal composition and public debt. Main findings:

  1. There is a motive for current (young) generations to keep debt low so as to prevent future generations to cut public spending in the future

  2. Under some conditions, this yields a determinate debt level and mean reverting dynamics (which appear to be an empirical feature).

  -- Key role of tax distortions

Sketch of the Theory

- Small open economy borrowing at rate R. Three dates t = 0,1,2. Dynasties:

$$\text{Old}_{t=0} \qquad \text{Old}_{t=0} \qquad \text{Old}_{t=1}$$
$$\text{Young}_{t=0} \qquad \text{Young}_{t=1}$$
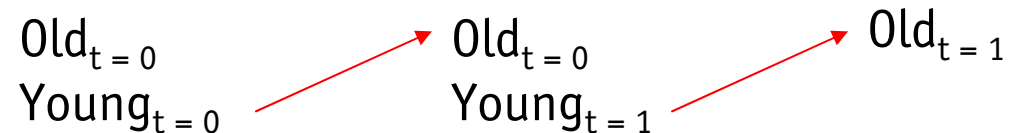
- Consume c_t and g_t. Time separable $u(c_t)$, $u(g_t)$. Public spending g_t is set politically. Tax flow T exogenously paid in each t by the old.

- If at every t the elderly run the country, i.e. choose g_t, then:

$$\max u(g_0)$$
$$\text{s.t. } g_0 \leq T + T/R + T/R^2$$

- The elderly consume everything and set $b_1 = T/R + T/R^2$. Future generations are "enslaved", pay taxes and consume no public goods.
  - Key assumption: no default on b_1

The Young Have Political Power

- If at every t the young set g_t, then after inheriting b_1 at $t = 1$:

$$\max u(g_1) + \beta u(g_2)$$
$$\text{s.t. } g_1 + g_2/R + b_1 R = T + T/R$$

- With iso-elastic $u(\, . \,)$, $g_1 = x(T + T/R - b_1 R)$ and the $t = 0$ young set:

$$\max u[b_1 + T] + \beta u[\, x(T + T/R - b_1 R)]$$

  - Setting b_1 too large is costly because it induces a cut in g_1 next period. The young do not pass all the bill to next generation.

- Intuition: the $t = 0$ young set the *total* resources of the $t = 1$ young, but the latter set the *distribution* between g_1 and g_2. Since tastes over g_1 and g_2 are incongruent across generations, the young at $t = 0$ use b_1 strategically.

One Caveat

- Lack of congruence should not be extreme. For example, if (ceteris paribus) young at t = 1 spend everything on g_2, then the young at t = 0

$$\max u(b_1 + T) + \beta u(0)$$

  - They set b_1 to its maximal level. Now the young are troublemakers, too

- General idea: if young and old have different preferences over public goods (e.g. schools vs. hospitals), young voters may have the incentive to over-borrow, not to be disciplined. Which effect dominates?

- Might be useful to consider this for two reasons: a) relate to the traditional literature on the static effects of inter-generational conflict, b) data...

Aside from this Caveat…

- The young keep debt low to prevent future voters from cutting g. This is stronger the stronger tax distortions are. Can yield determinate debt level.

- ZSS study ∞-horizon model with intra-generational heterogeneity as well. Calibration consistent with cross country evidence on mean reversion of debt under left and right wing governments
  - Of course, they need to make assumptions (e.g. no capital tax, no interest rate effects…) but the analysis of the model is extremely well done.

- Broad hypothesis on role of inter-generational conflict is plausible and interesting. The "disciplining" effect considered by the authors is neat.

- Two main substantive comments on the paper…

1 - Demographics and Public Debt

- Authors mainly stress mean reversion result. Other papers obtain this result (e.g. Aiyagari 2002, Krusell et al. 2006 Battaglini and Coate 2006, Debortoli 2008). Also, authors look at this through the lenses of left-right, differences, which is not the central (and novel part) of their approach.

- Greater focus on demographic factors. What is the empirical relationship between size of government/debt and age structure?
  - Do younger voting populations run smaller or larger public debts?
  - Is there an empirical association between debt accumulation and inter-generational composition of public spending?

- The impact of demographic variables on public spending and debt is the natural motivation/testing ground for this paper.

2 – What is g_t in Reality?

- Bulk of the growth in the size of governments/debts in last 50 years due to cash transfers and public provision of private goods such as education or health (e.g. Tanzi and Schuknecht 2000).

- If government is "redistributive machine", young at t=0 set $T + b_1$ so as to:

$$\max u(c_0) + \beta u(c_1)$$

$$\text{s.t.} \quad c_0 + c_1/R = W + T + b_1$$

  – Set huge debt $b_1 = T/R + T/R^2$, get all future taxes for themselves, smooth consumption using financial markets. Future generations have no power!

- Thus, insofar as b and g are shaped by redistribution, this model cannot tell us why current generations do not transfer everything to themselves.
  – Role of Privatization/Deregulation?
  – Might need other ingredients
  – Complementarities between public and private consumption

Conclusions

- I enjoyed reading the paper. Important question, interesting and plausible hypothesis.

- Neat theoretical mechanism

- Strengthen the feedback between the theory and the empirics. Both benefit from more interaction. Role of demographics and redistribution