Discussion of "Taxing Capital in the Presence of Trickle-Down Effects: A Sufficient Statistics Approach"

by Lukas Mayr

Sebastian Dyrda

University of Toronto

8th Annual Mannheim Taxation Conference September 10, 2021

- "Trickle-down" effect: low taxes on capital induce investment, which in turn increases the demand for labor. Wage boost benefits poorer households.
- **This paper:** study theoretically and quantitatively this effect in an environment encompassing many standard macro, public finance frameworks.
- Very good paper with some neat theoretical results and significant quantitative results. Highlights the role of the GE effects.
- Room for improvement on the both fronts.

- Starts with general environment, nesting several important benchmark models as special cases.
- Derive testable optimality condition for the capital income tax as function of key elasticities: $\bar{\epsilon}_{K_t,1-\tau_k}$, $\bar{\epsilon}_{L_t,1-\tau_k}$ and $\bar{\epsilon}_{w,1-\tau_k}$. The challenge: these are **unobserved**, **policy elasticities**.

- Starts with general environment, nesting several important benchmark models as special cases.
- Derive testable optimality condition for the capital income tax as function of key elasticities: $\bar{\epsilon}_{K_t,1-\tau_k}$, $\bar{\epsilon}_{L_t,1-\tau_k}$ and $\bar{\epsilon}_{w,1-\tau_k}$. The challenge: these are **unobserved**, **policy elasticities**.
- Key contribution of the paper: recover these elasticities from estimated, sufficient statistics: (i) K L substitution elasticity (ii) capital and labor income shares (iii) taxes (iv) wage elasticity of labor supply (v) capital supply elasticity.
- Quantify the policy elasticities and capital taxes: (i) The optimal capital tax is falling with the total gross income (ii) Hhs up to 75th percentile would benefit from further tax increase relative to exogenous prices.

Comments (1)

- 1. Ruling out wealth effects on labor supply simplifies algebra, but:
 - Empirical evidence of wealth effects on labor supply: Golosov, Graber, Mogstad, Novgorodsky (2021)
 - They interact with capital taxation: wealth and productivity are positively correlated → increase in capital income tax implies negative wealth effect → wealthy-productive work more, poor-unproductive work less (transfers) → labor productivity rises in the economy.

- 1. Ruling out wealth effects on labor supply simplifies algebra, but:
 - Empirical evidence of wealth effects on labor supply: Golosov, Graber, Mogstad, Novgorodsky (2021)
 - They interact with capital taxation: wealth and productivity are positively correlated → increase in capital income tax implies negative wealth effect → wealthy-productive work more, poor-unproductive work less (transfers) → labor productivity rises in the economy.
- 2. Sufficient statistic approach:
 - Inherently local formulas evaluated around the current tax system. Yet the optimality calls for more than doubling capital tax. How valid is the local approximation?

Comments (2)

- 3. What is the real world counterpart of the capital income tax in the model?
 - The U.S. tax system **pools together capital and labor income** and taxes them according to the personal income tax code.
 - The paper has two separate instruments and conducts the analysis holding the labor income tax fixed.

Comments (2)

- 3. What is the real world counterpart of the capital income tax in the model?
 - The U.S. tax system **pools together capital and labor income** and taxes them according to the personal income tax code.
 - The paper has two separate instruments and conducts the analysis holding the labor income tax fixed.
- 4. The key object for quantitative results: capital supply elasticity
 - Poorly measured in the U.S.. Paper uses elasticity of wealth w.r.t. to wealth tax from Danish data.
 - Though the object that matters for the GE effects is **elasticity of productive capital** w.r.t. capital tax.
 - Wealth vs. Productive capital. In the model, they are the same, in the data not (housing).
 - Exploit the estimated elasticities of the capital stock following the corporate tax rate changes in the U.S.?