

Discussion of “Tax Policy, Investment and Profit-Shifting” by
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Summary

- Great paper written by leading experts in this field! We have learned a lot.
- **Main Contribution:** The paper clarifies the difference between macro and micro tax rate elasticity of profit shifting with an aid of a model.

- Total shifted profits (Π_p):

$$\Pi_p(\vec{\tau}) = N_p(\vec{\tau}) \times \alpha(\vec{\tau}) \times B(\vec{\tau})$$

– N_p is the number of profit-shifting firms, α is average shift share, B is the tax base.

- The semi-elasticity of tax rate changes on total shifted profits is:

$$\underbrace{\frac{\partial \log \Pi_p(\vec{\tau})}{\partial \tau_{TH}}}_{\text{macro elasticity}} = \underbrace{\frac{\partial \log N_p(\vec{\tau})}{\partial \tau_{TH}}}_{\text{extensive margin}} + \underbrace{\frac{\partial \log \alpha(\vec{\tau})}{\partial \tau_{TH}}}_{\text{intensive margin: shift}} + \underbrace{\frac{\partial \log B(\vec{\tau})}{\partial \tau_{TH}}}_{\text{intensive margin: base}}$$

- **Main result:** The macro elasticity is 24% higher than the micro elasticity.

Profit Shifting Technology or Intangible Capital?

- Y_i is referred to as “intangible asset”. It really is a technology of profit-shifting (lawyers, accountants, legal structure of MNE etc.)

$$c(\alpha_{ij}, B_{ij}, Y_i) = \frac{\gamma}{2} \left(\frac{B_{ij}}{Y_i} \right)^m \alpha_{ij}^2$$

- Typically economists think intangibles are **non-rivalry in use** and used as **production input**. No direct linkage between Y_i and production in the paper.
- Related but broader point: authors leave the mechanism by which firms shift profits **unspecified**.
 - Strategic Location of IP, International Debt Shifting, Transfer Pricing Manipulations?
 - Matters for underlying economics, elasticities and welfare.

More productive firms shift more profits?

- The null relationship between profit shifting share α and productivity θ (if $Y > 0$):

$$\alpha_{ij} = \left[\frac{1}{\gamma} (\tau_j - \tau_X)^{1+m} \left(\frac{1}{2} \frac{m}{p_i (1+r)} \right)^m \right]^{\frac{1}{1-m}}$$

→ If p_i and θ_i are independent, then $\partial\alpha/\partial\theta = 0$

→ Is it true in the data? **Testable model prediction.**

- Profit shifting MNEs are profitable and productive firms from the very right-tail of size distribution. Would the model get this selection margin right?

What is a demand shifter Π_{ij} ?

- **Identification issue.** Note, revenues are:

$$\theta_i K_{ij}^A + \Pi_{ij}$$

How do you separately identify productivity and demand? Pervasively problematic in working with firm level data (Foster, Haltiwanger and Syverson (2008)).

- Should the shifter be included in the tax base?

$$B_{ij} = \theta_i K_{ij}^A + \Pi_{ij} - \delta K_{ij}$$

- Related, should the intangible capital investment $p_i Y_i$ and cost of profit shifting C_{ij} be tax deductible?

Conclusion

- Great paper on a timely topic.
- Combines theory and empirics to clarify how tax reforms affect intensive and extensive margins of profit shifting.
- Quantifies the consequences of the OECD tax reform.

Thank you!