Discussion
The Misallocation of Finance
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Summary

- Growing macro literature studying the misallocation of production *factors* (capital and labor)
- Dispersion in marginal products lowers endogenous TFP
- Quantitatively large results

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- ▶ **This paper**
  - ▶ Adapts the Hsieh/Klenow 09 framework
  - ▶ Misallocation of finacial liabilities: debt and equity

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▶ **This paper**
  ▶ Adapts the Hsieh/Klenow 09 framework
  ▶ Misallocation of finacial liabilities: debt and equity

▶ China to US counterfactual: 40% to 55% gains

▶ Cross-section of Chinese firms: larger, developed city firms face smaller frictions

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▶ Two differences with Hsieh/Klenow
  1. Debt and equity as inputs
  2. CES firm technology

Approach

- Firm solves

$$\pi_{si} = P_{si}F_{si} - \left[(1 + \tau_{D_{si}}) \, rD_{si} + (1 + \tau_{E_{si}}) \, \lambda E_{si}\right]$$

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▶ Hsieh-Klenow: different capital/labor ratios imply misallocation

▶ Whited-Zhao: different debt/equity ratios imply misallocation

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▶ Hsieh-Klenow: different capital/labor ratios imply misallocation
▶ Whited-Zhao: different debt/equity ratios imply misallocation
▶ Constant α_s: strong assumption
▶ Combine firms optimality conditions to recover
   ▶ $1 + \tau_{E_{si}}$
   ▶ $1 + \tau_{D_{si}}$
   ▶ $TFPQ$

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4. Smaller wedges for large, developed city firms
5. Lots of robustness checks/sensitivity

Comments

1. How compelling is the use of debt/equity as inputs

   ▶ Key assumption: *"the production factors—capital, materials, labor, and energy—can then be thought of as unmodeled intermediate inputs"*.

   ▶ I was expecting:

$$J(b_0) = \beta \underbrace{\int_{\underline{s}}^{\bar{s}} \pi(s) \, dF(s) - k_0}_{\text{Net Present Value}} + \underbrace{(\phi - 1) \beta \int_{\underline{s}}^{s^*} \pi(s) \, dF(s) -}_{\text{Cost of Distress}} \underbrace{\psi(k_0 - b_0)}_{\text{Equity Issuance Cost}}$$

   ▶ There should be an optimality condition within the firm on how a dollar gets spend

   ▶ Impose some extra structure, keeping τ wedges

   ▶ Joint financing/production problem

     ▶ Real and financing wedges

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2. Two degrees of freedom
    ► Why not using different wedges?
       ► "Financing composition" wedge: $\frac{1+\tau_{E_{si}}}{1+\tau_{D_{si}}}$
       ► "Access to finance" wedge: $\left(1+\tau_{E_{si}}\right)\left(1+\tau_{D_{si}}\right)$

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3. Refine cost of capital measures
   - ▶ Easy to do in finance (CAPM)
   - ▶ Relaxes some

Final Remarks

- Very interesting exercise
- Scope to further develop the approach
  - Combine financing and production data to discipline misallocation measures
- Lots of promise