Discussion of "International Diversification, Reallocation, and the Labor Share" by David, Ranciere and Zeke

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One-slide summary

- Aggregate labor share has declined in the US and other developed countries. But firm-level labor share is increasing.
- 2 Model with risk-averse firm owners: quantity and price of firm-specific risk drives labor share.
 - Predicts within-firm increases and reallocation towards low-labor-share firms.
- 3 Additional predictions confirmed in Compustat data:
 - Risky firms have lower labor share.
 - Firms with foreign equity are more responsive to risk.

Outline

- 1 Intuition for the main mechanism
- 2 Are public firms representative of the economy?
- 3 Can we replicate the results in Hungary?

Risk-adjusted profit maximization

$$\max_L \mathsf{E}[AF(K,L) - wL]$$

VS

$$\max_{L} \mathsf{E}[\Lambda[AF(K,L) - wL]]$$

Intuition

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Firm is a *leveraged* portfolio with a risky asset Q and a safe liability L.

Key assumption: labor is less risky than capital.

Optimal leverage depends on risk-return tradeoff: higher risk means lower leverage.

Glossary

labor

inputs decided before uncertainty is resolved

labor share

leverage ratio

low-labor-share firm

high excess-return portfolio

Are public firms representative of the economy?

Volatility trends differ for public and private firms (Comin and Philippon 2006 vs Davis et al 2007)

Employment-Weighted Volatility of Firm Growth Rates

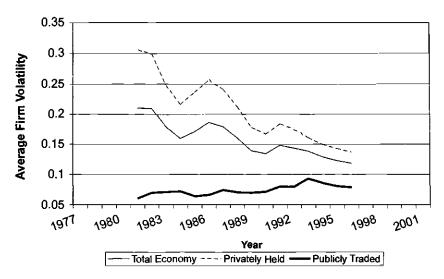


Figure 1: Davis et al 2007 (Figure 2.5)

Can we replicate the results in Hungary?

Data from Hungary

Universe of corporations, 1989-2019: 870k businesses, of which 99% are private.

Labor share: personnel costs / value added (as in paper)

Firm beta: 2-year growth rate of log sales on log aggregate growth (unlike in paper)

Higher beta firms have lower labor share

| Beta portfolio | Mean labor share |
|----------------|------------------|
| 0 | 0.619 |
| 1 | 0.589 |
| 2 | 0.523 |
| 3 | 0.457 |
| 4 | 0.456 |
| | |

Bigger firms have lower labor share

| Size portfolio | Mean labor share |
|----------------|------------------|
| 0 | 0.785 |
| 1 | 0.725 |
| 2 | 0.665 |
| 3 | 0.582 |
| 4 | 0.508 |
| | |

Except for largest firms, labor share is driven by size, not beta

| Beta | Size 0 | Size 1 | Size 2 | Size 3 | Size 4 |
|------|--------|--------|--------|--------|--------|
| 0 | 0.772 | 0.702 | 0.640 | 0.527 | 0.621 |
| 1 | 0.786 | 0.732 | 0.664 | 0.596 | 0.587 |
| 2 | 0.788 | 0.741 | 0.680 | 0.594 | 0.519 |
| 3 | 0.775 | 0.723 | 0.663 | 0.574 | 0.449 |
| 4 | 0.787 | 0.720 | 0.661 | 0.580 | 0.441 |

Conclusion

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Great to bring in asset pricing and portfolio choice in production problems.

Helps reinterpret real metrics (markup, labor share) as financial (risk premium, leverage).

But: finance and risk of private firms very different from those of public firms.

Smaller points

What if markets are incomplete? Λ_{it} rather than Λ_t

Cattaneo et al (2023) "On Binscatter": cannot do covariate adjustment before binscatter