

Discussion of
“Efficiency or resiliency? Corporate choice between
financial and operational hedging”

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Financial hedging vs. operational hedging

This paper studies corporate choice between financial and operational hedging

- ▶ **financial hedging**: cash savings
- ▶ **operational hedging**: inventory, excess capacity, supply chain diversification

Financial hedging vs. operational hedging

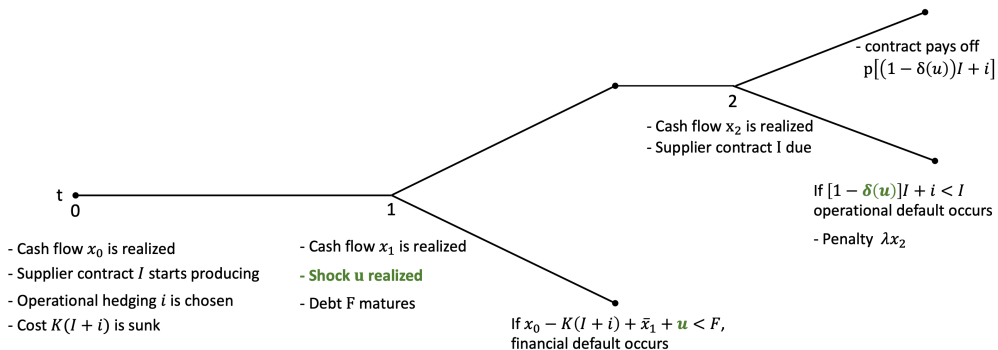
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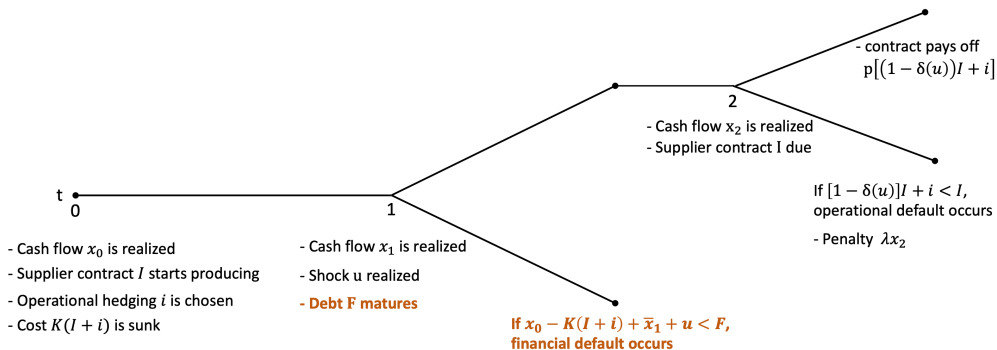
Main insight: firms with limitations on outside financing *substitute* between saving cash for financial hedging and spending on operational hedging

Empirical prediction: a positive relationship between leverage and markup

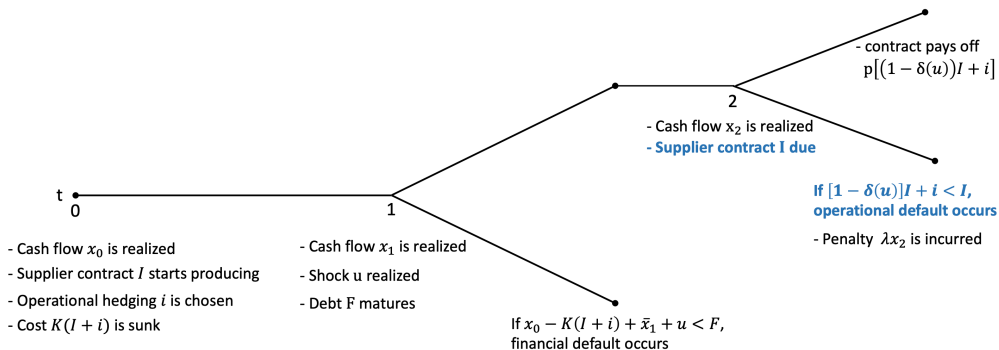
Framework of the paper



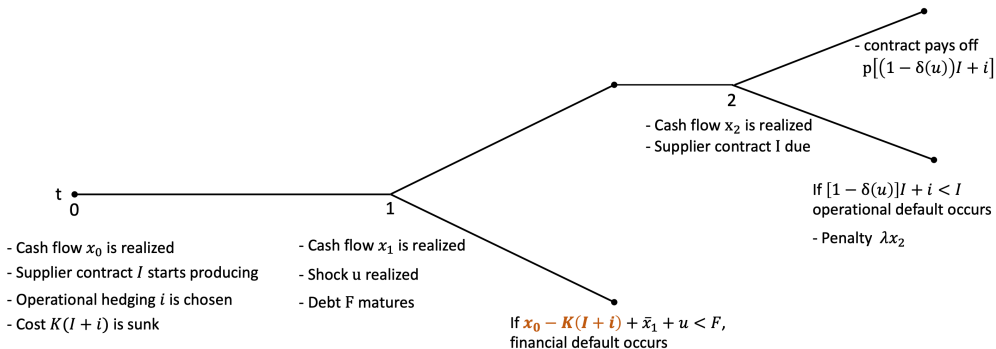
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Financial hedging

Reduces risk of financial default

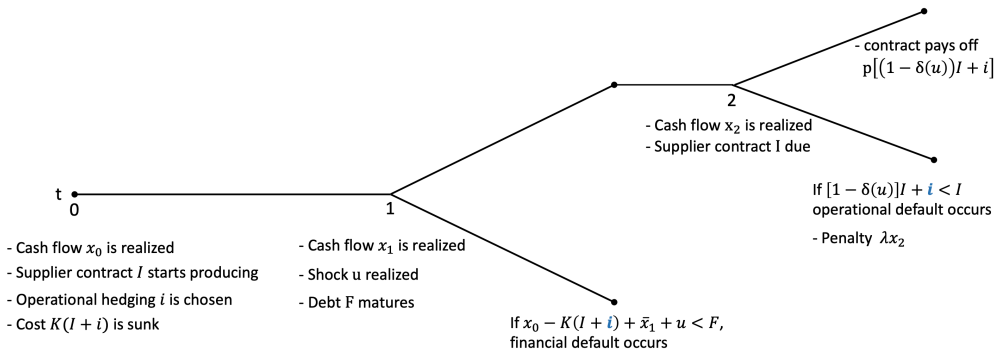
**Increase risk of operational default
(time-to-build & budget constraints)**

Operational hedging

Increases risk of financial default

Reduces risk of operational default

Framework of the paper



	t=1	t=2
Financial hedging	Reduces risk of financial default	Increases risk of operational default
Operational hedging	Increases risk of financial default	Reduces risk of operational default

Key drivers of the model

1. Fixed financial obligations
2. Fixed purchase obligations
3. Mismatch between asset payoffs and liability
4. Time-to-build
5. Low pledgeability of future cash flows

Overall assessment

What I like about the paper

- ▶ an extremely relevant question
- ▶ an intuitive and insightful framework
- ▶ a number of important and broad implications

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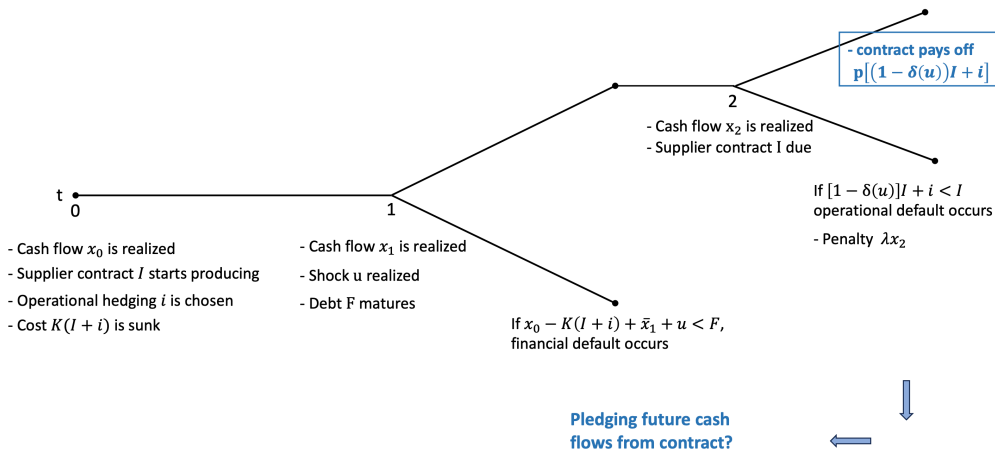
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My comments center around

- ▶ pledgeability of future cash flows
- ▶ the role of inventory for financially constrained firms
- ▶ the relation between leverage and markup
- ▶ broader implications

Comment 1: Pledging future cash flows to avoid financial default



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Pledging $\tau p[(1 - \delta(u))I + i]$ at $t = 1$ to make debt payment

- ▶ e.g., cash flow-based borrowing, working capital loans, trade credit, etc.
- ▶ If pledgeability, τ , is high enough, the tension between financial and operational hedging breaks down

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The paper: results are stronger when pledgeability is low, as indicated by

- ▶ high residual cash (however, endogenous to both u and τ)
- ▶ recession and credit supply shocks (comment 2)

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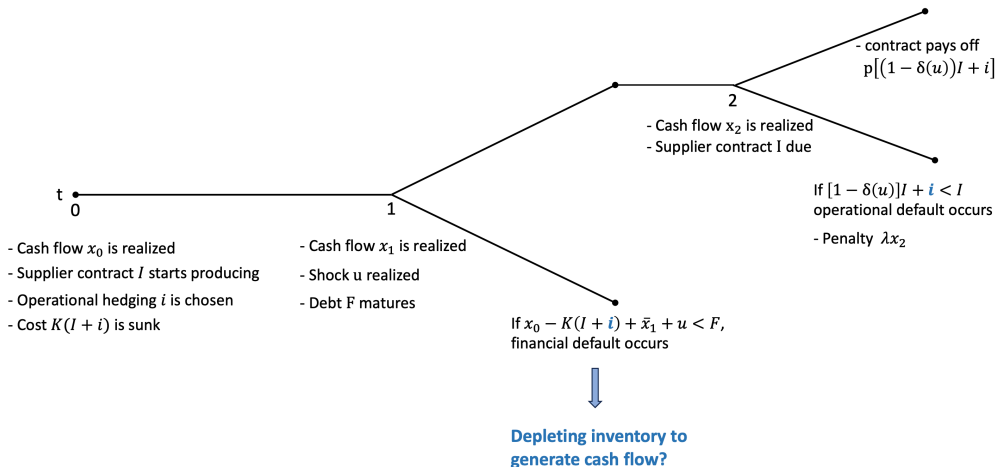
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Further (cross-sectional) tests

- ▶ *ex-ante* measures of financial constraints rather than cash holdings
- ▶ the ability to obtain financing from customer

Comment 2: Depleting inventory to avoid financial default



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Additional benefits of holding inventory (Dasgupta, Li, and Yan 2019)

- ▶ **lower adjustment cost**: when facing liquidity shocks, selling inventory is less costly than selling physical capital
- ▶ **production cost-smoothing**: (both UFC and FC) produce more in low-cost states and sell from inventory in high-cost states

Explanation for why FC holds more inventory

Comment 3: Leverage and markup

The paper tests a positive relationship between leverage and markup

- ▶ Higher leverage → higher cash savings → lower operational hedging → lower production cost → higher operational spread (markup) → higher risk of operational default
- ▶ What remains: higher risk of operational default (e.g., market share)

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Alternative explanation for the positive relation

- ▶ Imperfectly competitive firms compete less aggressively during recession
- ▶ Liquidity-constrained firms boost short-run profits by raising prices to cut their investment in market shares (Chevalier and Scharfstein 1996)

The paper should test whether the relation holds more for competitive market

Comment 4: Broader implications

Benefits and costs of using purchasing obligations (PO)

- ▶ Noncancelable contracts with suppliers for materials or services, generally over one to three year horizons, with fixed price provisions
- ▶ PO are used widely as a substitution to derivative hedging, especially for financially constrained firms (Almeida, Hankins, and Williams 2017)
- ▶ The paper points to potential costs of PO to suppliers

The insight of the paper could be extended beyond the current setting

- ▶ debt \Rightarrow wage, fixed operating cost, etc.
- ▶ operational hedging \Rightarrow other spendings that tighten short-term liquidity constraints but generate additional long-term value (R&D, advertisement)

Thank You

Reference I

- Almeida, H., Hankins, K., and Williams, R. (2017). Risk Management with Supply Contracts. *The Review of Financial Studies*, 30(12):4179–4215.
- Chevalier, J. A. and Scharfstein, D. S. (1996). Capital-market imperfections and countercyclical markups: Theory and evidence. *The American Economic Review*, 86(4):703–725.
- Dasgupta, S., Li, E. X. N., and Yan, D. (2019). Inventory Behavior and Financial Constraints: Theory and Evidence. *The Review of Financial Studies*, 32(3):1188–1233.