- Discussion -

Dynamic Coordination and Bankruptcy Regulations by Hongda Zong & Zhen Zhou

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Setting the Scene

Research Question

Summary

How do bankruptcy rules affect firms' funding liquidity risk?

"Conventional" view: higher recovery rate ⇒ lower run risk.

This Paper

- Dynamic "clock game" that studies optimal bankruptcy rules.
- Focuses on "avoidable preference" (clawbacks) and "automatic stay."
- Key Result: Higher recovery rates may in fact increase run risk!
- Why? Restricting exit incentivizes creditors to demand repayment earlier.

Simple theoretical framework that provides clear results.

Big issue (in my opinion): What firms/creditors are we talking about?

- Authors make passing reference to publicly traded NFC, commercial banks, etc.
- Opacity about covenant violation seeens most applicable to private firms.
- "Synchronization" risk at model's core most relevant for dispersed creditors.

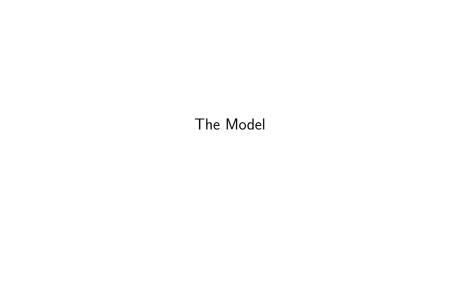
Presentation and policy/empirical implications.

- Are the authors interested in drawing normative or positive conclusions?
- Results depend on some rather stark assumptions (extensions at the end).
- More general model may allow for sharper empirical predictions.

This Discussion

Outline

- Brief overview of the model
- Some comments and suggestions



Representative firm financed by a continuum of creditors $i \in [0, 1]$.

At some random date t_0 , the firm's asset becomes impaired (g' < g).

- Creditors do not observe whether the firm's asset is impaired.
- However, given the shock, the firm starts violating debt covenants.
- Creditor i's covenant is violated at some random date $t_i \geq t_0$.
- Given violation, creditor i decides whether/when to demand repayment.

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Symmetric equilibrium: amount of time $\tau^* \geq 0$ before divestment following violation.

The firm declares bankruptcy once a fraction $k \in [0, 1]$ creditors exit.

Optimal Clawbacks

The regulator can clawback funds withdrawn by creditors before bankruptcy.

Optimal clawback window m maximizes $\tau^*(m)$. Why?

- Increases recovery value given bankruptcy ($\uparrow \tau^*$).
- Decreases likelihood of full repayment $(\downarrow \tau^*)$.

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How does changing the clawback window m affect τ^* ?

- Increases recovery value given bankruptcy ($\uparrow \tau^*$).
- Decreases likelihood of full repayment $(\downarrow \tau^*)$.

Optimal Timing of Bankruptcy

What if the firm can choose how many creditors to serve before declaring bankruptcy?

Will the firm optimally chooses to serve creditors until it runs out of assets?

- Equity holders gain from delaying bankruptcy (if resurrection is possible).
- Larger k allows more creditors to exit before bankruptcy $(\uparrow \hat{t})$.
- Larger k also increases likelihood of full repayment for creditors $(\uparrow \hat{t})$.
- But larger k decreases the recovery value given bankruptcy $(\downarrow \hat{t})$.

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Comments¹

 $^{^1\}mathit{Full}$ disclosure: a lot of my comments are already hinted at by the authors themselves!

Comments 1 – Delaying Repayment

In the model, policies that delay repayment ($\uparrow \tau^*$) are always desirable.

This follows because the firm is financially but not economically distressed.

- The authors assume that transferring assets out of the firm destroys value.
- If g' < 0, result is overturned and welfare becomes **decreasing** in τ^* .
- In this case, either always clawback everything or don't clawback at all.

In practice, uncertainty about the future growth prospects of distressed firms.

How to capture this in the model?

Comments 2 – Automatic Stay

In the model, automatic stay $(k^* < k^{max})$ generally lowers the firm's funding risk.

In practice, (financial) firms also often rely on instruments with stay exemptions.

Exemptions may increase collateral pledgeability and reduce firms' funding costs. (See, e.g., Antinolfi et al. (2015), Bolton & Oehmke (2015), Kuong (2015, WP)).

Channel is absent from the model (ex post analysis, exogenous capital structure).

The authors argue that renegotation is not feasible (dispersed creditors, hold out).

Assumption seems a bit heroic given empirical evidence (Roberts & Sufi (2008)).

Recent research highlights interaction between bankruptcy rules and renegotation. (See, e.g., Colliard & Gromb (2020), Donaldson et al. (2020)).

Do bankruptcy rules that increase recovery rates reduce scope for renegotiation?

