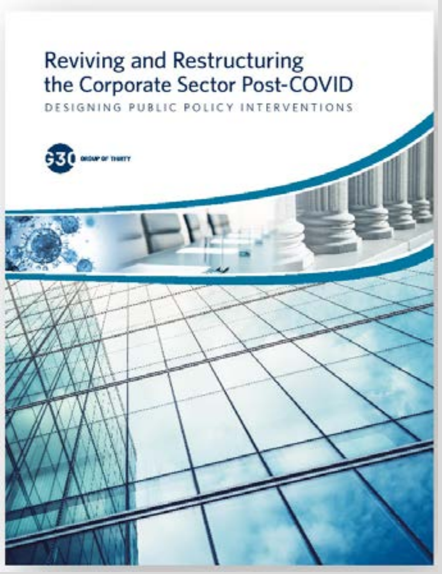
Financial Stability Challenges in the Aftermath of the Covid Crisis

Victoria Ivashina

March 17, 2022

HARVARD | BUSINESS | SCHOOL

We are in a different financial context



- Defensible but also operationally more constrained banking sector
- In many developed countries, significantly higher and different corporate leverage
- On the positive side, substantially larger pools of alternative private capital

Rise in Leverage, and Leveraged Lending in Particular Have Been a Source of Concern, even before 2020 Debt Double-Down

November 15, 2018

Warren Presses Regulators on Risks in Leveraged Lending Market

https://www.warren.senate.gov/oversight/letters/warren-presses-regulators-on-risks-in-leveraged-lending-market-

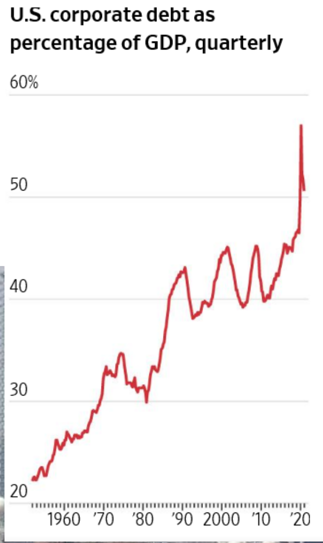
March 20, 2020

Warren Raises Concerns that Leveraged Lending Market Could Escalate Risks to Financial System as Coronavirus Outbreak Continues to Rattle Markets

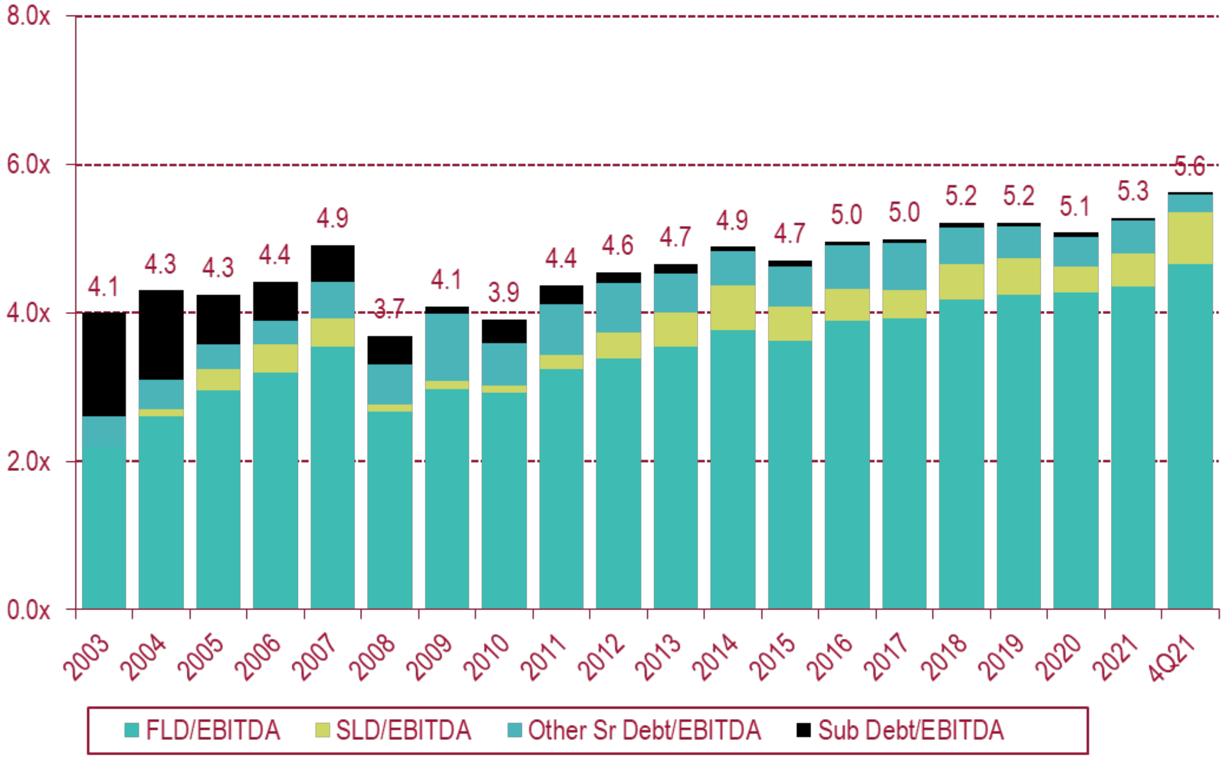
https://www.warren.senate.gov/oversight/letters/warren-raises-concerns-that-leveraged-lending-market-could-escalate-risks-to-financial-system-as-coronavirus-outbreak-continues-to-rattle-markets

THE WALL STREET JOURNAL.

By Sam Goldfarb
June 14, 2021 10:40 am ET

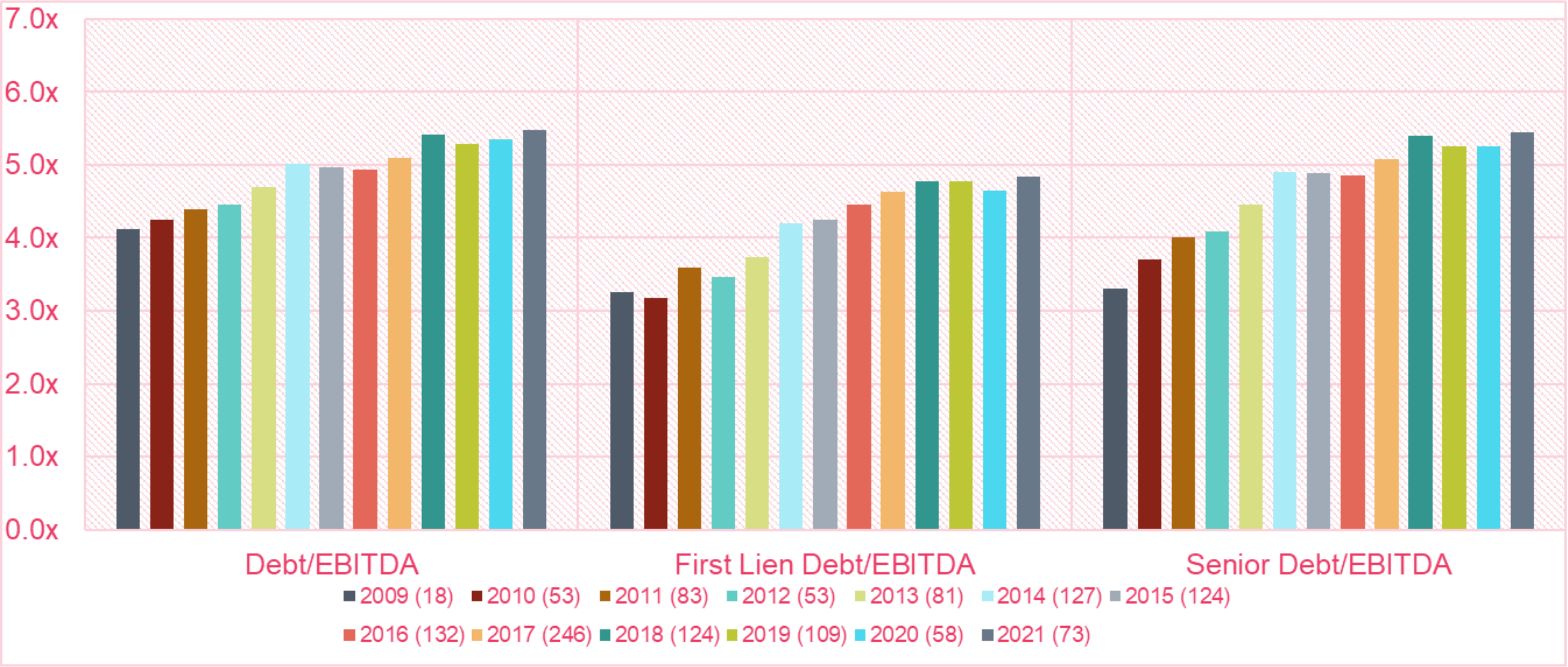


Average Debt Multiples of Large Corporate Loans: U.S.



Source: S&P Global Market Intelligence

Average Debt Multiples of Large Corporate Loans: Europe

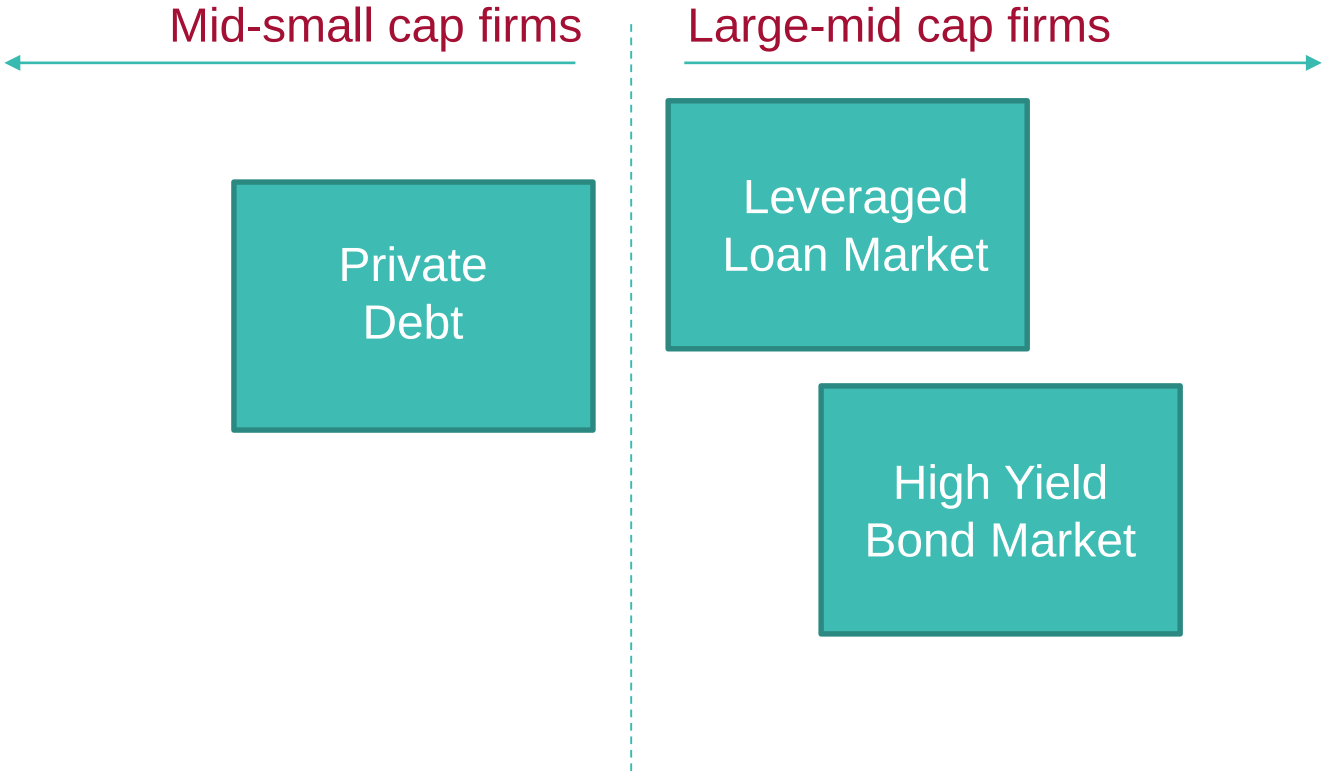


Source: S&P Global Market Intelligence

Core Questions:

1. Are there (new) levered and/or runnable debt investors?
2. Are there hidden risks?
3. Are there near-term default triggers or constraints for borrowers?
4. Are there significant constraints on restructuring?

Segments of the Financial Market Catering to High Corporate Leverage



Are there (new) levered and/or runnable debt investors?

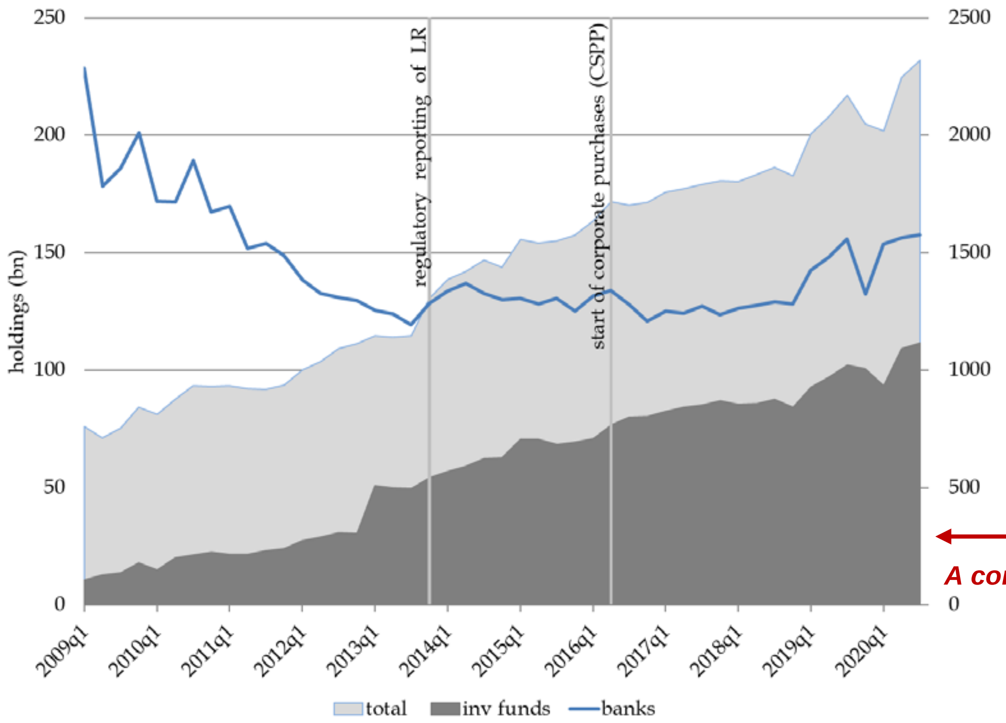
How Does Corporate Debt Become a Problem for the Economy?

Intermediaries' balance sheet:

1. Fast moving forces: Intermediaries/bank losses due to a shift in fundamentals (think GFC)
   - Amplified through leverage (capital constraint or mark to market)
   - Runnable structure

2. Slow moving forces: "Zombie" lending – i.e., through reallocation of limited capital toward less productive firms (Peek and Rosengren (2005); Caballero, Hoshi, and Kashyap (2008), etc.)

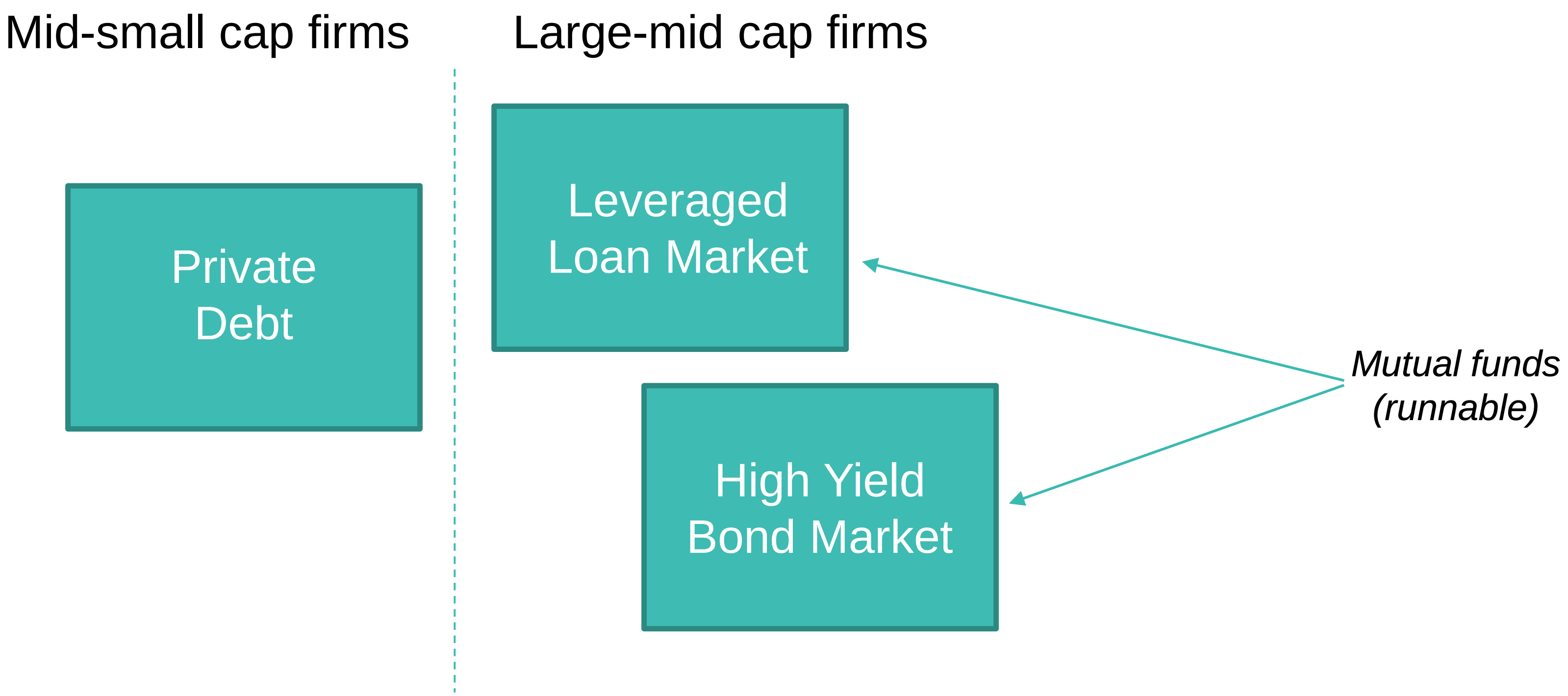
Bond Market Size and Bank Holdings in Europe



A core source of concern

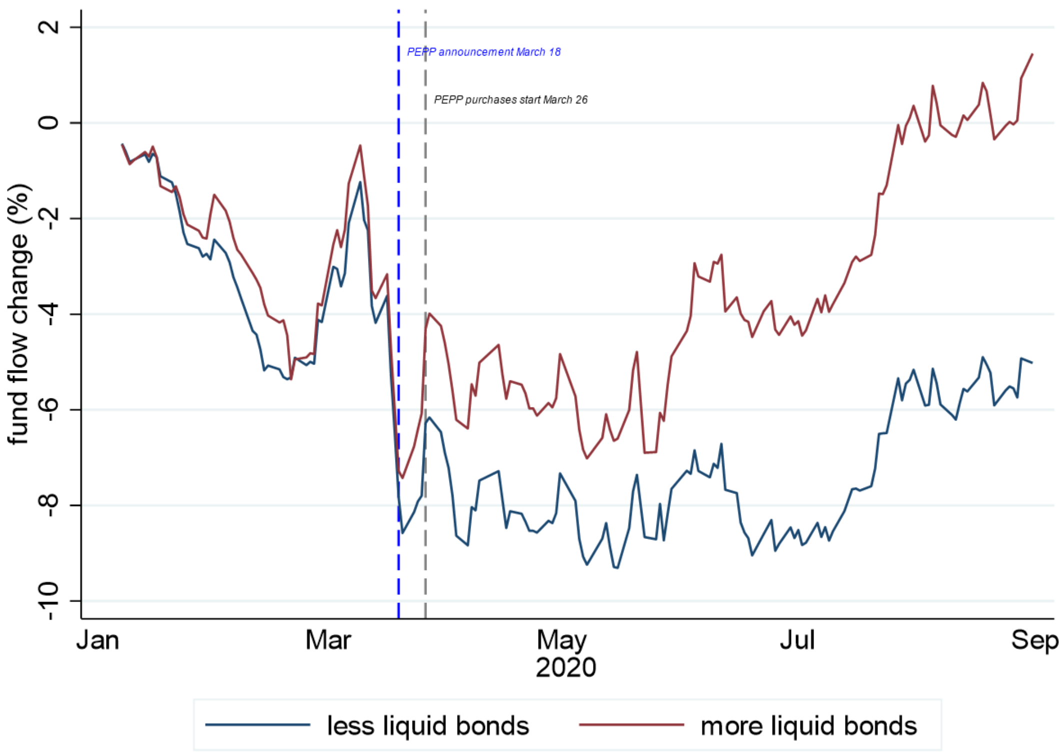
Source: Johannes Breckenfelder and Victoria Ivashina, 2021, “Bank Balance Sheet Constraints and Bond Liquidity”

Segments of the Financial Market Catering to High Corporate Leverage



Q: Are there (new) levered and/or runnable debt investors?

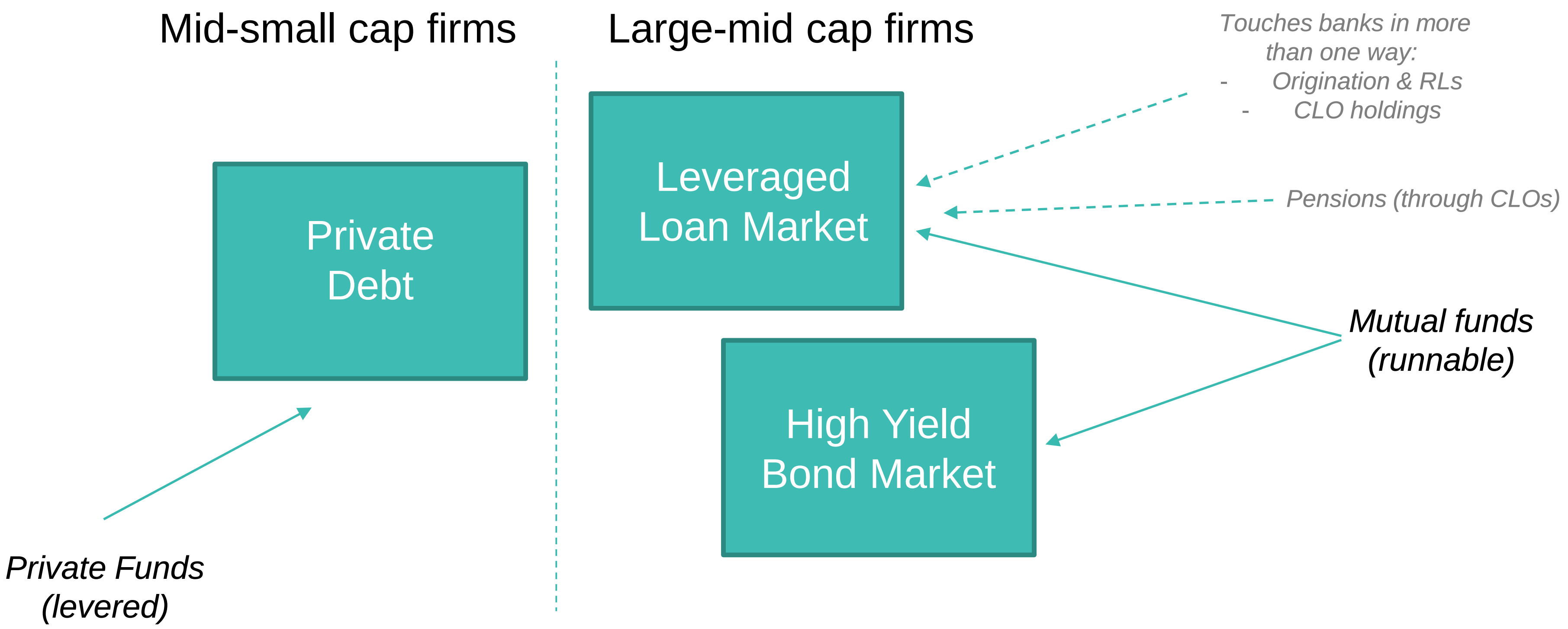
Bond Mutual Funds Redemptions: Europe



Source: Johannes Breckenfelder and Victoria Ivashina, 2021, "Bank Balance Sheet Constraints and Bond Liquidity"

Large & growing literature, e.g., A. Falato, I. Goldstein, A. Hortaçsu (2020), Ma, Xiao, and Zeng (2020)

Segments of the Financial Market Catering to High Corporate Leverage

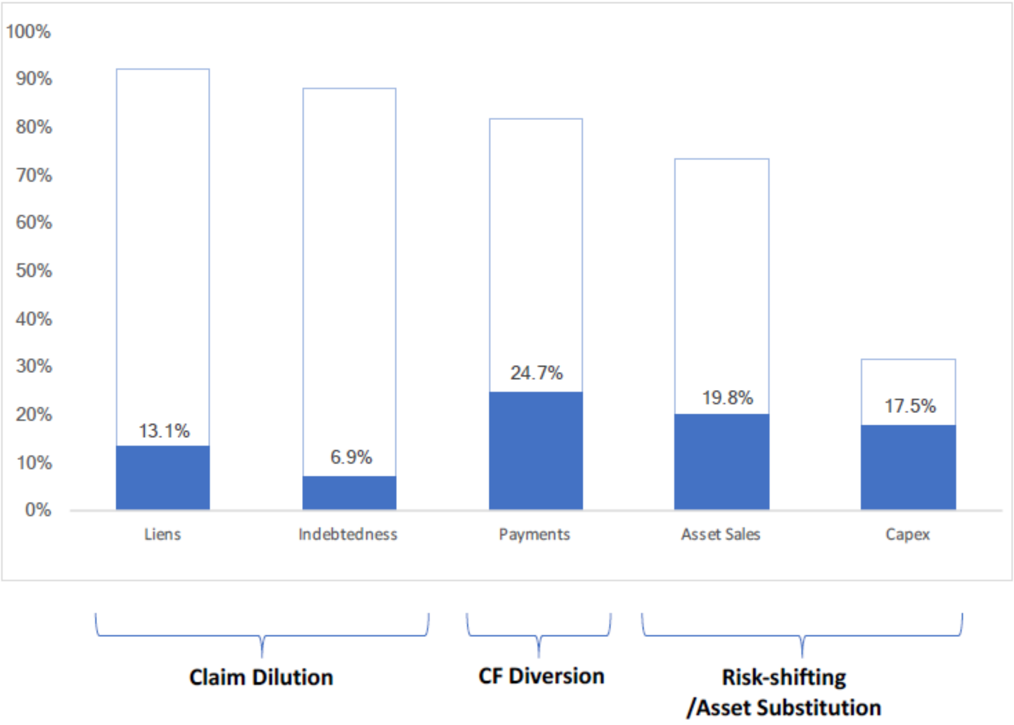


Q: Are there (new) levered and/or runnable debt investors?

Are there hidden risks?

The Erosion of Covenant Structure on Senior Secured Debt is Prevalent:

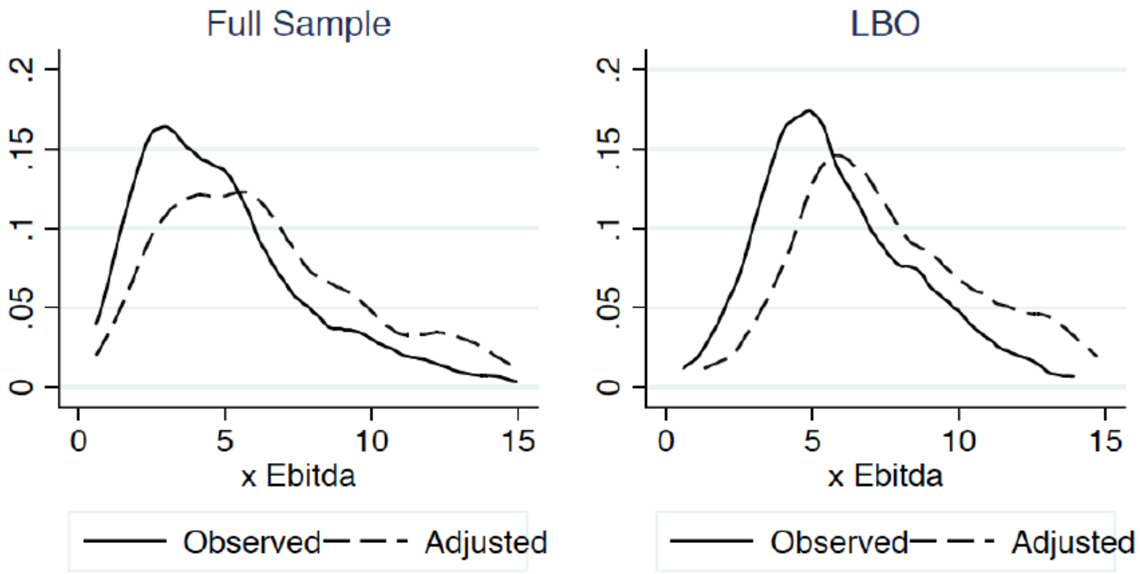
Share of Leveraged Loans without Deductibles



Source: Victoria Ivashina and Boris Vallee, 2019, “Weak Covenants”

The Erosion of Covenant Structure on Senior Secured Debt is Prevalent:

Distribution of Leverage when Adjusted for Indebtedness Deductible



Source: Victoria Ivashina and Boris Vallee, 2019, “Weak Covenants”

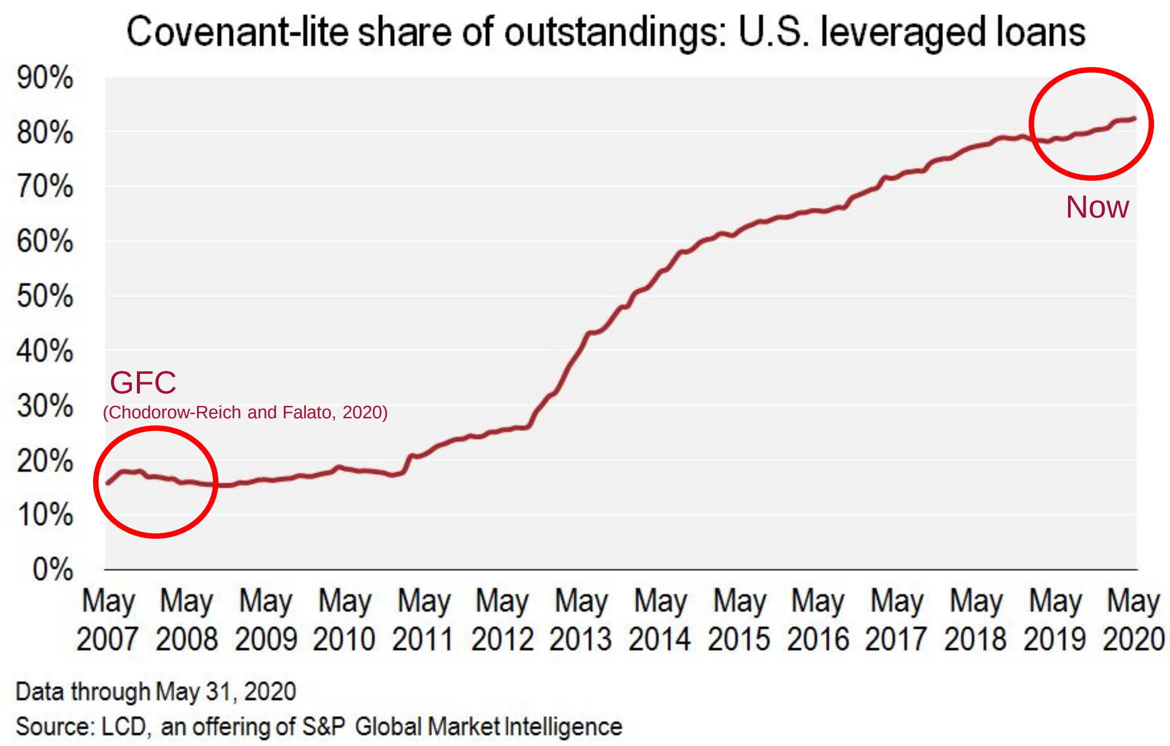
Are there near-term default triggers or constraints for borrowers?

How Does Corporate Debt Become a Problem for the Economy?

Firm’s balance sheet:

- Debt overhang (Myers (1977), Giroud and Mueller (2017))
- Costly bankruptcy (Greenwood, Iverson and Thesmar (2020); Ellias, Iverson and Roe (2021), G30 Report on Revitalizing and Restructuring Corporate Sector Post-Covid)
  - But, to be pushed into bankruptcy there has to be a trigger/ ”event of default”
    - Missed payment (interest, amortization, or maturity) – arguably, none of this is binding in the current environment
    - Covenant violation (Chodorow-Reich and Falato, 2020)

Rise of “Cov-Lite”: Current Debt Environment Different than 2008/09



Definitions: Cov-lite/”Incurrence” Covenants:

- It is about financial covenants (think Debt/EBITDA)

- Cov-lite loans do not have fewer or looser covenants, instead they have covenants with <u>different enforcement mechanisms </u>(so, imagine there are two identical companies, each has a loan agreement with max 5x Debt/EBITDA)

Definitions: Cov-lite/”Incurrence” Covenants:

- It is about financial covenants (think Debt/EBITDA)

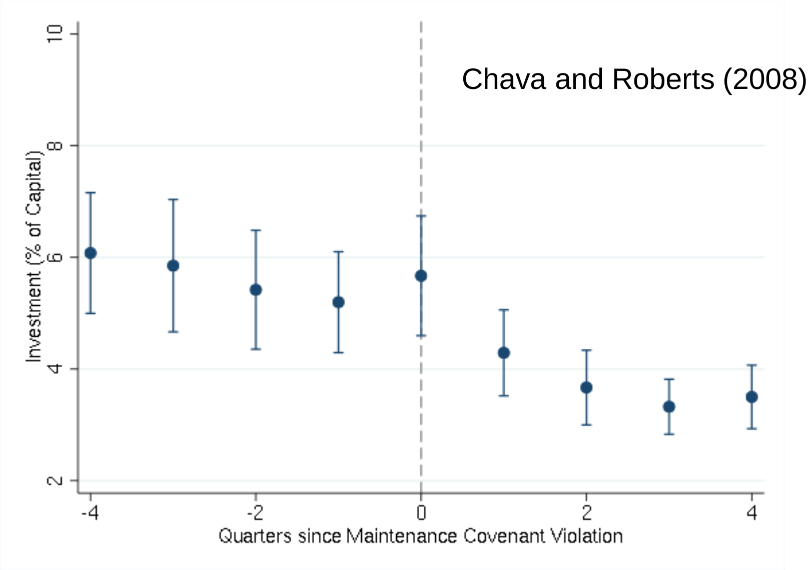
- Cov-lite loans do not have fewer or looser covenants, instead they have covenants with <u>different enforcement mechanisms </u>(so, imagine there are two identical companies, each has a loan agreement with max 5x Debt/EBITDA)

    - <u>Firm A</u> has a loan with “<u>maintenance covenants</u>” which requires the company to maintain leverage <5x on a quarterly basis
        - Crossing 5x constitutes a technical default and shifts control rights to creditors

    - <u>Firm B</u> has a loan with “<u>incurrence covenants</u>” (cov-lite) which requires the company to comply with <5x only in the event that it incurs a certain action (e.g., issuance of additional financing, sale of assets, or merger)
        - Crossing 5x activates “restricted actions” specified in the contract

Investment Response to Covenant Trigger: Loans Originated 2017-2019

Maintenance (i.e., “Traditional” Loan) Covenants

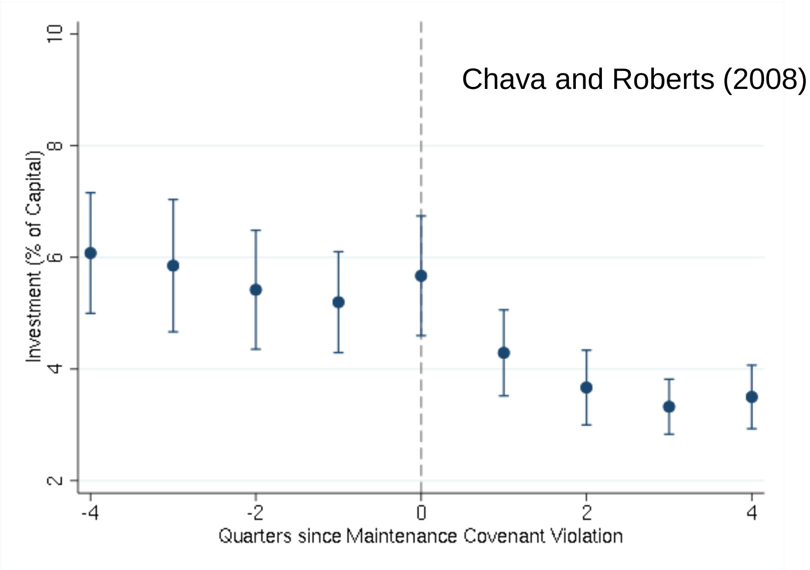


Note: Average investment rates and 95% confidence intervals relative to the quarter of the first covenant violation.

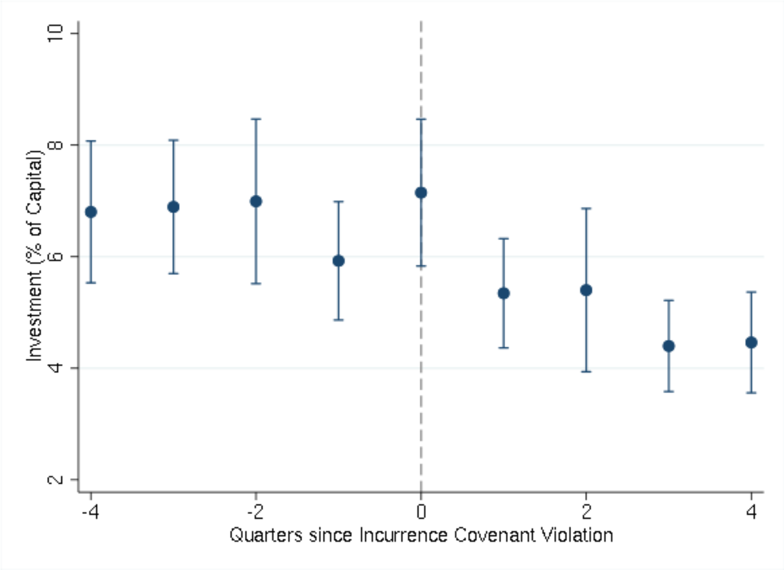
Source: Falk Bräuning, Victoria Ivashina and Ali Ozdagli, 2022, “High-Yield Debt Covenants and Their Real Effects”

Investment Response to Covenant Trigger: Loans Originated 2017-2019

Maintenance (i.e., “Traditional” Loan) Covenants



Incurrence (i.e., “High-Yield” Debt Loan) Covenants



Note: Average investment rates and 95% confidence intervals relative to the quarter of the first covenant violation.

Source: Falk Bräuning, Victoria Ivashina and Ali Ozdagli, 2022, “High-Yield Debt Covenants and Their Real Effects”

Incurrence Covenants (i.e., Cov-Lite Contracts) Impose Significant Contractual Constraints on Borrowers

- Key insight for how to think about unraveling of a negative economic shock in a highly levered economy where debt is cov-lite

- Although the “bankruptcy wall” is far removed, it is not business unusual: the drop in investments after incurrence covenant trigger is sizable and quick

Are there significant constraints on restructuring?

Cross-Sectional and Time-Series Variation in EU Insolvency Systems

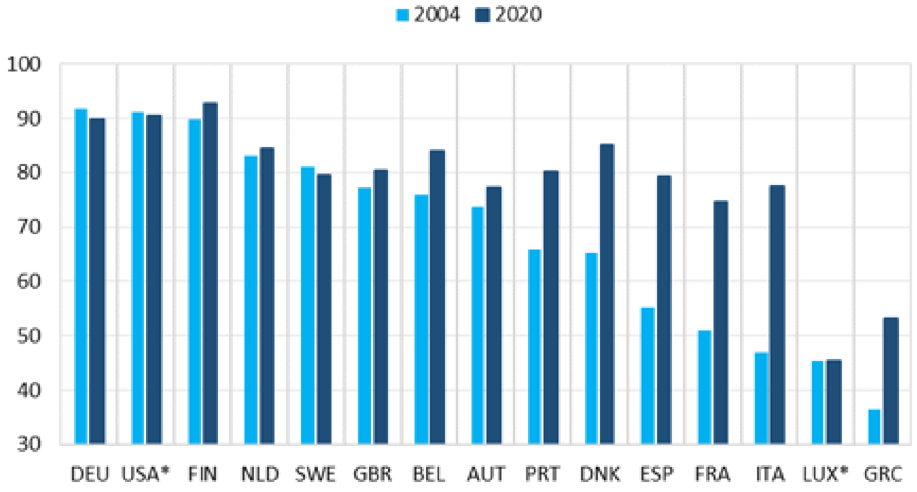
(World Bank Main Insolvency Score, 0-100)

Chart 1

Country-level variation in insolvency restructuring scores

World Bank Main Insolvency Score

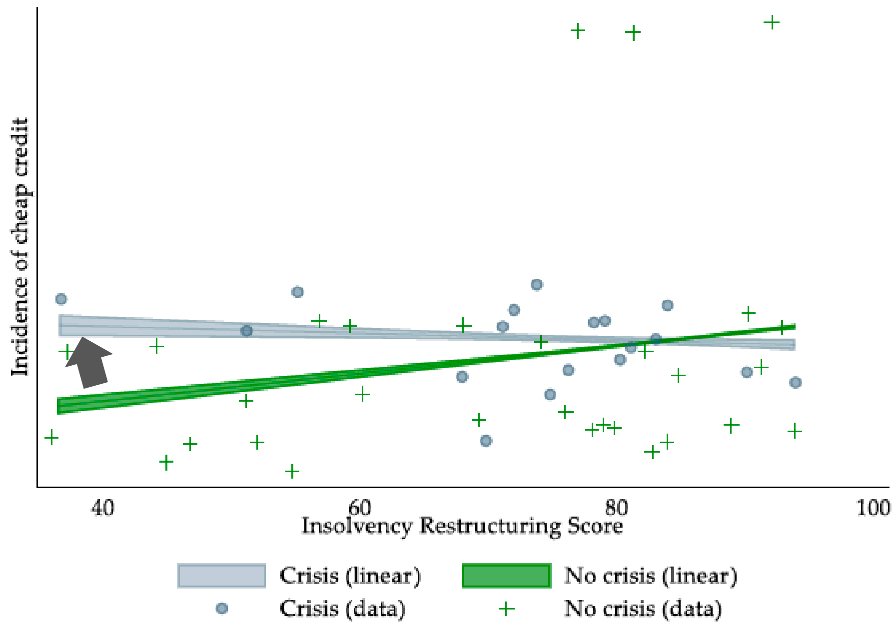
(The score varies from 0 to 100.)



Sources: World Bank.
Notes: (*) US and Luxemburg data starts in 2014.

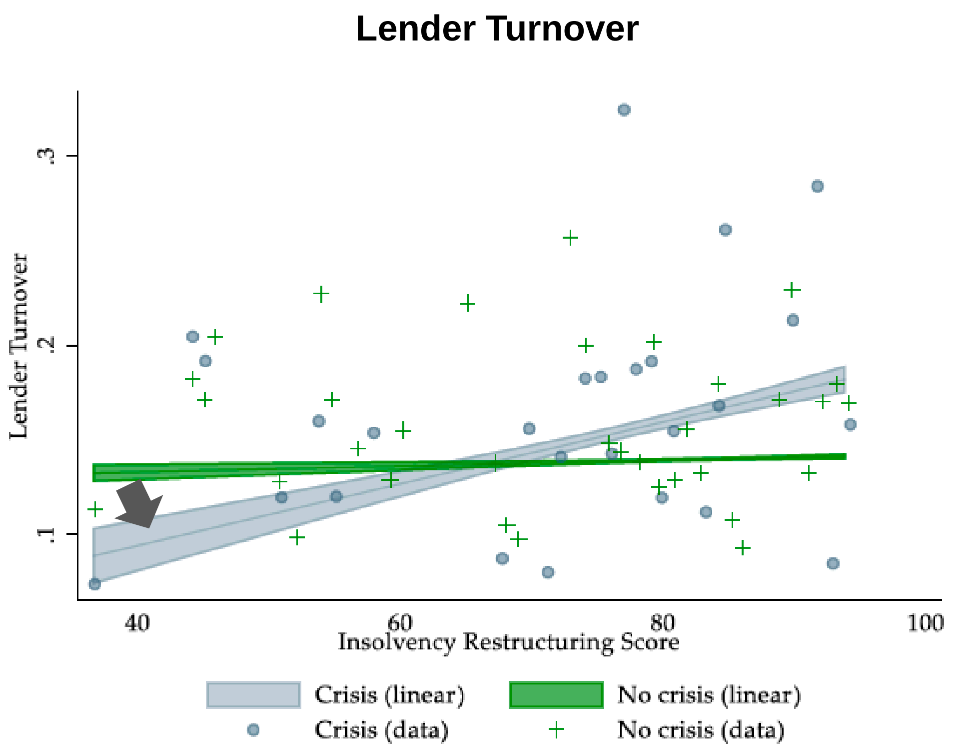
Poor Restructuring Countries See Zombie Credit in Crisis Periods

Share of loans with below AA cost (after controls)



Source: Bo Becker and Victoria Ivashina, 2021, “Corporate Insolvency Rules and Zombie Lending”

Poor Restructuring Countries Stickier Lenders in Crisis Periods



Source: Bo Becker and Victoria Ivashina, 2021, “Corporate Insolvency Rules and Zombie Lending”

Insolvency Framework is Important

- Cost of restructuring
- (NEW) Incentives for zombie lending
  - We look at banks, but this holds for all types of creditors

Ideal policy responses differ

1. Zombie lending tied to bank incentives: Bank capital
2. Zombie lending tied to insolvency regime: better formal insolvency

Targeting banks as a policy response to zombie lending helps but cannot always resolve the problem (because this is no longer just a problem of alignment of incentives)

Core Questions:

1. Are there (new) levered and/or runnable debt investors?
2. Are there hidden risks?
3. Are there near-term default triggers or constraints for borrowers?
4. Are there significant constraints on restructuring?

Thank you!

HARVARD | BUSINESS | SCHOOL