

# Credit Market Equivalents and the Valuation of Private Firms

*Hüther, Schmid, and Steri*

Discussion – FIRS – Spring 2021

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# This Paper

## Pricing of Private Equity

- Does Private Equity create value?
  - Jensen (financial) theory of the firm
  - Rajan financing lifecycle theory of the firm
- How do evaluate firm value
  - NPV
  - What is  $r$ ?
  - Role of capital structure and ownership

## In the background

- New ways of evaluating PE: PME/GPME
- Integration between debt and equity

# This Discussion

A lot to cover ...

- Evaluation of PE: what's new here?
- Structure of ownership: motivating the pricing assumptions
- Should we price everything with “bond factors”?

# Plan

**1** Private Equity Evaluation

**2** Empirical Framework

# PE Evaluation: State of the Field

## Public Market Equivalents

- Focused on equity side of deals
- Get LPs cash flows and discount using standard asset pricing
  - ▶ NPV rule:  $\sum_t CF_t / (1 + r)^t$
  - ▶ market return  $r = R^{\text{MKT}}$  (PME) or beta adjusted  $r = \beta R^{\text{MKT}}$

## Main Assumptions

- Investors (LPs, GPs) are well diversified
- CAPM works (market return accounts for the risk premium)

# How is this paper different?

## Integrated markets

- PME or GPME infers SDF from “equity prices” (in the best case)
- Use SDF from PE debt markets to price standard PE cash flows
  - Precedent: Philippon

## Main Assumption: debt and equity markets are integrated

- Claims on the same assets
- Similar sets of investors

# Plan

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2 Empirical Framework

# Pricing using loans

## Pricing

- Fit loan pricing data for PE deals
- Use common factors: standard equity factors and two “bond-specific” factors
  - Is factor selection ex-ante or ex-post (selection bias, overfitting...)
  - Training/Validation sample?
- External validity of the model
  - Market integration: pricing should apply globally
  - Similar firms that are public
  - Equity markets?

## Origin of the loan data

- Are loan prices actual trades or simply quotes?
- What is the DGP for imputing loan data?
  - factor model, missing at random, matrix pricing?

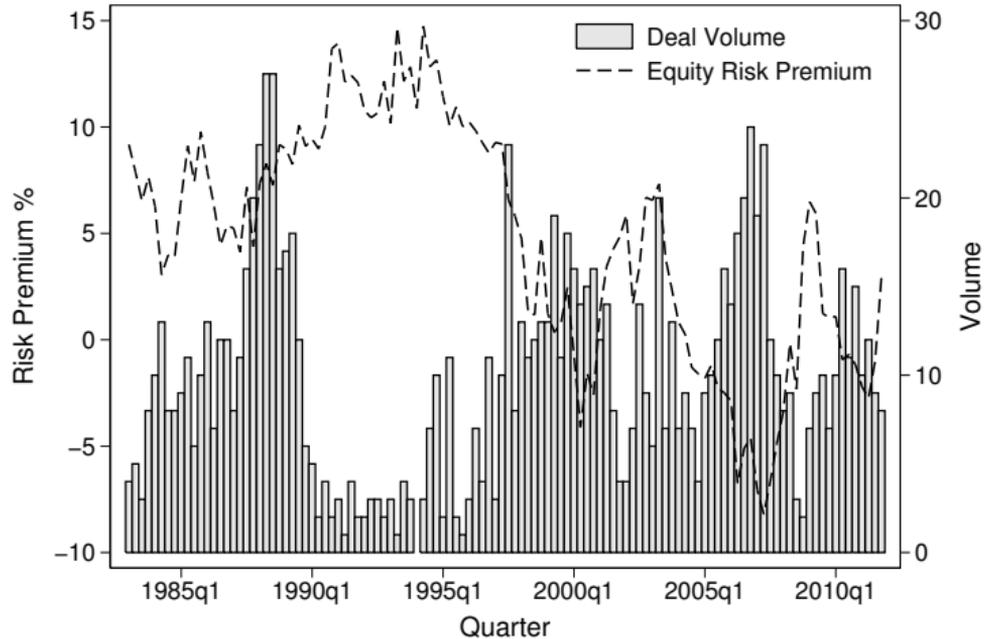
# More evidence of debt/equity integration

## This paper

- Bring modern asset pricing apparatus
- More precise estimation of deal value
- Reevaluate how useful private equity is

# More evidence of debt/equity integration

## Other evidence of equity and debt market integration



# More evidence of debt/equity integration

## Other evidence of equity and debt market integration

- Time variation in expected returns predicts LBO activity (Haddad, Loualiche, Plosser)
- Measure of expected returns based on *equity* markets
- Another way to show that PE literature can learn from asset pricing (and vice-versa maybe!)

# Final Thoughts

**Very interesting Paper!**

**Take away**

- New way to evaluate
- Based on asset pricing model fitted to loan data
- Tighter integration between debt and equity market than usually assumed
- Importance of asset pricing for purely corporate finance transactions

**Great Paper!**