Discussion:
Do Market Prices Improve the Accuracy of Court Valuations in Chapter 11?

Vidhan K. Goyal

HKUST

What is the paper about?

- TRACE:
  - Assembles all OTC bond transactions and publicly disseminates these transactions in real time.

- Research Question:
  - Does public dissemination of bond prices increase the accuracy of court valuations of equity in Chapter 11 reorganizations?

- Sample:
  - 86 publicly traded firms that emerged from Chapter 11 during 2001-2010.

Key Results

- Public dissemination of bond prices (via TRACE implementation):
  - Reduced court valuation errors in Chapter 11 reorganizations
  - Eliminated unintended wealth transfers
- Dissemination of bond prices matters *less* for Chapter 11 firms that:
  - **Large**
  - Followed by **more equity analysts**
  - **R**eceived **acquisition bids**
  - Have **hedge funds** holding unsecured bonds

Comments: Understanding Mechanism

- Theory: Court misvaluations and wealth transfers arise because courts lack information that is relevant for valuation.

  – Even though bonds trade, prices are not available.

  – When prices become available through TRACE, courts can more accurately estimate enterprise value.

    - What changes do public availability of bond prices cause to the bankruptcy resolution process?

Understanding Mechanisms: Continued

- Because bonds can be valued more accurately, overall estimates of firm value improve.
  - How large are publicly traded bonds in a firm's capital structure?
  - Misvaluation should vary inversely with the fraction of publicly traded bonds in overall firm value.
- Does public dissemination of bond prices affect the valuation of other liabilities?
  - If APR does not hold, how easy it is to estimate the value of other claims if market prices of bonds are available?

Understanding Mechanisms: Continued

- Misvaluations because of relative bargaining strength of senior versus junior creditors.
    - Valuation errors could reflect strategic distortions
- TRACE improves liquidity – makes it easier for bondholders to assemble blocks.
    - This changes power dynamics and could result in better coordination among claimants.
    - Hence, lower misvaluation by courts.

Presence of Hedge Funds

- Argument:
  - "Presence of hedge funds reduces distortions arising from agency conflicts between the debtor and unsecured creditors."
  - Dissemination of bond prices matters less when hedge funds are present.
- Implies that court valuation errors arise because of distortions resulting from agency conflicts among claimants.
- It will be helpful if the paper provided a better understanding of what causes court valuation errors.

Comments: Real Effects of Greater Bond Price Transparency

- What are the real effects of greater transparency?
  - Does it result in lower deadweight costs of bankruptcy? Lower costs of reorganization
  - Shorter bankruptcy duration? Faster resolution of bankruptcy?
  - More efficient resolution of bankruptcy – fewer firms re-filing for Chapter 11.

Comments: Testing Other Implications

- Is default less likely for firms with publicly available bond prices?

- Differences in offered yield on bonds conditional on public dissemination of prices?

Test 1: Quasi-experimental Setting

- Take Chapter 11 companies with publicly-traded bonds (N=52)
  - 33 firms had bonds with prices disseminated (*Disclosure* sample)
  - 19 firms had bonds with prices not disseminated (*Non-Disclosure* sample)
- Compare court misvaluation for the two sub-samples

	(1) Overall	(2) Disclosed	(3) Not Disclosed	(4) Difference [(2)-(3)]
Misvaluation (%)	47.7	36.6	67.0	−30.4**
Misvaluation (%) <25%	36.5	45.5	21.1	24.4*
Misvaluation (%) [25% to 50%)	26.9	30.3	21.1	9.3
Misvaluation (%) [50% to 100%]	19.2	15.2	26.3	−11.2
Misvaluation (%) >100%	17.3	9.1	31.6	−22.5**
Observations	52	33	19	52

$$MisVal_i = a + b_1 Disclosed_i + cX + e_i$$

	(1)	(2)	(3)	(4)	(5)	(6)	(7)
Disclosed (d)	−30.43**	−52.36***	−46.73***		−30.77**	−27.79**	−25.03*
	(−2.49)	(−3.02)	(−2.91)		(−2.38)	(−2.48)	(−1.89)
Disclosure initiated in Phase 1 (d)				−42.07**			
				(−2.55)			
Disclosure initiated in Phase 2 (d)				−36.49			
				(−1.50)			
Disclosure initiated in Phase 3 (d)				−32.72**			
				(−2.05)			
Disclosure initiated after Phase 3 (d)				−39.21*			
				(−1.68)			
Emerged during TRACE implementation (d)				−8.25			
				(−0.64)			
Assets (at filing, CPI adjusted) (log)						−8.26**	
						(−2.23)	
Leverage ratio (at petition) (%)						−0.03	
						(−0.17)	
Return on assets (pre-petition) (%)						0.63	
						(0.96)	
Stock volatility (post-emergence) (%)						1.44*	
						(2.00)	
Pre-packaged (d)							17.97
							(1.48)
Creditors' committee (d)							−5.79
							(−0.28)
Equityholders' committee (d)							5.49
							(0.36)
DE or NY SD (d)							−11.83
							(−0.78)
Constant	67.01***	90.36**	62.99***	75.26***	61.63***	106.16***	67.43**
	(6.41)	(2.69)	(3.41)	(4.45)	(4.73)	(2.83)	(2.58)
Emergence year dummies	N	Y	N	N	N	N	N
File year dummies	N	N	Y	N	N	N	N
Industry dummies	N	N	N	N	Y	N	N
N	52	52	52	52	52	52	52
R^2	0.12	0.29	0.25	0.13	0.19	0.28	0.18

- Decision on which bonds to include in staggered disclosure was not rule based.
- Unobservables that determine NASD's decision could also drive court misvaluations.
  - Liquidity, for example, could be driving both decision to include bonds for dissemination and also court valuation errors.

Test II: Differences-in-Differences

	Pre-Trace	Post-Trace
Firms with Bonds	No dissemination	Prices disseminated
Firms without Bonds	No dissemination	No dissemination

Average Misvaluation

	Before TRACE			After TRACE			
	(1) Bond	(2) No Bond	(3) Difference	(4) Bond	(5) No Bond	(6) Difference	(7) DID
Misvaluation (%)	65.1	42.0	23.0	38.6	65.7	−27.1*	−50.1**
Misvaluation (%) <25%	16.7	52.6	−36.0**	40.0	25.0	15.0	−51.0**
Misvaluation (%) [25% to 50%)	33.3	21.1	12.3	30.0	25.0	5.0	−7.3
Misvaluation (%) [50% to 100%]	16.7	15.8	0.9	20.0	16.7	3.3	2.5
Misvaluation (%) >100%	33.3	10.5	22.8*	10.0	33.3	−23.3	−46.1**
Observations	18	19	37	20	12	32	69

Difference-in-Differences Results

Panel A. Size of Court Misvaluations

	(1)	(2)	(3)	(4)	(5)
Traded bonds (d)	23.03	24.12*	20.95	24.80*	21.23
	(1.57)	(1.79)	(1.29)	(1.97)	(1.39)
Post-TRACE (d)	23.64	−28.25	23.74	28.16**	23.50
	(1.41)	(−0.83)	(1.47)	(2.02)	(1.26)
Traded bonds (d) x Post-TRACE (d)	−50.09**	−50.77**	−55.44**	−46.61**	−49.07**
	(−2.26)	(−2.33)	(−2.34)	(−2.34)	(−2.10)
Emergence year dummies	N	Y	N	N	N
Industry dummies	N	N	Y	N	N
Firm characteristics	N	N	N	Y	N
Bankruptcy characteristics	N	N	N	N	Y
N	69	69	69	69	69
R^2	0.08	0.33	0.14	0.31	0.12

Conclusions

- Important question.
- Nice empirical setting. Well written paper.
- Suggestions:
  - More discussion (and tests) of channels through which public dissemination of bond prices affects court valuations.
  - Provide some evidence on other implications (other than wealth transfer)