

Debt, Distress, and Restructuring of Small, Private Firms

Young Soo Jang

2/16/23

DDR of small, private firms

- So far in class: debt, distress and restructuring of large, public firms
- Today: debt, distress and restructuring of small, private firms
 - Small and medium-size enterprises (SME)
 - Middle-market firms (MM)
- Environment very different:
 - No active secondary market (bonds are rarely issued)
 - No credit rating
 - Accounting less standardized (27% SMEs & 73% MMs use audited financials)

Why care about small, private firms?

- 1996-2019: Number of public firms nearly halved from 8090 to 4266
- Employment (non-farm payroll)
 - 2000: 84M (74%) in private, 29M (26%) in public firms (Davis et al 2006)
 - Each private firm employs more today (Stulz 2020):
 - 1977-2012: Among firms with 5,000+ employees, publicly listed fell from 50% to 27%
- Investments: private firms generally invest more (Asker et al 2014)
 - Avg private (public) firms invest 10% (4%) of total assets each year

Why care about small, private firms?

- High investments + low access to external equity => debt is crucial!
 - Not those VC unicorns that you hear from the news
- Key questions covered today:
 - Who are the lenders (bank & nonbank)?
 - What types of debt are used? What are contractual terms?
 - How is distress monitored and resolved?
- Separately consider:
 - Small and medium-size enterprises (SME)
 - Middle-market firms (MM)

Data re. bank lending by firm type (as of 2019)

- Despite recent growth in nonbank lending, we should first look at bank lending universe to understand the relative size of each market
- Total bank corporate lending: \$4.61T commitment & \$2.25 outstanding made by 350 banks (FR Y9C) (Chodrow-reich et al 2022)
 - $\approx 10\%$ are very small SME loans with loan size $< \$1M$
 - 70-80% with loan size $> \$1M$ made by Fed-supervised banks (FR Y14)
 - Total bank debt held by public firms: \$1.7T
 - Total bank debt held across firm size distribution:
 - Assets below \$50M (mostly SME): \$287B
 - Assets between \$50M and \$1B (mostly MM): \$833B
 - Assets above \$1B: \$2.431T

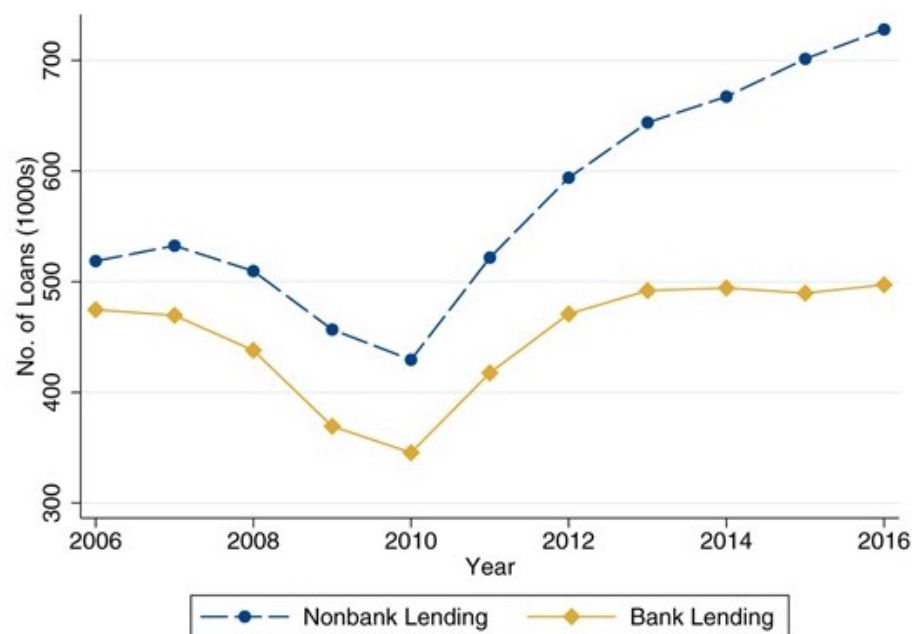
SME Debt Financing

- No standard definition: e.g. assets < \$50M or revenue < \$10M
- Who are the lenders? (Gopal and Schnabl 2022)
 - Commercial banks (large bank holding companies & small, regional banks)
 - Top 5 banks: Wells Fargo, US Bank, JP Morgan, Bank of America, BB&T
 - Nonbank lenders: Finance companies and Fintechs
 - Unlike banks, no deposits and no capital regulation, and actually rely on bank debt
 - Fintechs primarily lend online
 - Top 5 Fincos: John Deere, CNH Capital America, Kubota Credit, GE Capital, Caterpillar

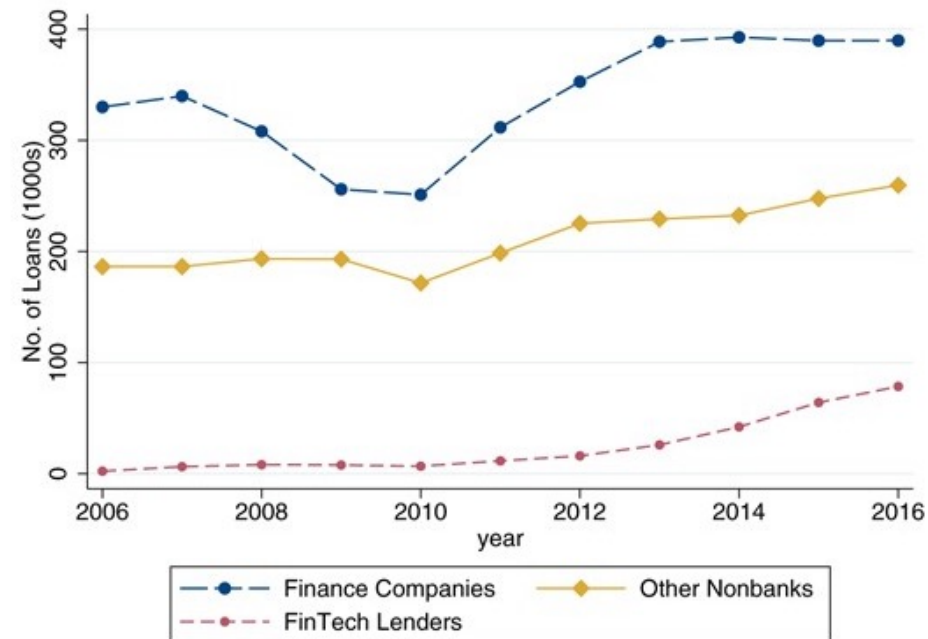
Post-GFC rising market share of nonbank lenders

Based on number of loans (from UCC filings; Gopal & Schnabl 2022)

A Bank versus nonbank loan origination



B Loan origination by nonbank lender type



- Today: around equal market share between bank and nonbank in ~1T SME loan market

Debt, Distress and Restructuring of SMEs

- Debt type: mostly asset-based loans
 - Common collateral: real estate, equipment, accounts receivable, inventory
 - Interest spread: 3-400 bps (Federal Reserve Survey on Terms of Business Lending)
- Contractual features: borrowing base to limit debt capacity based on estimated liquidation value of pledged collateral
- Restructuring (?): Upon distress, typically hard to restructure and more likely liquidated via Chapter 7
 - Bernstein et al (2019); Lian and Ma (2021)
- Similar patterns across lender types (bank vs nonbank)

Bankruptcy liquidation rates by firm size

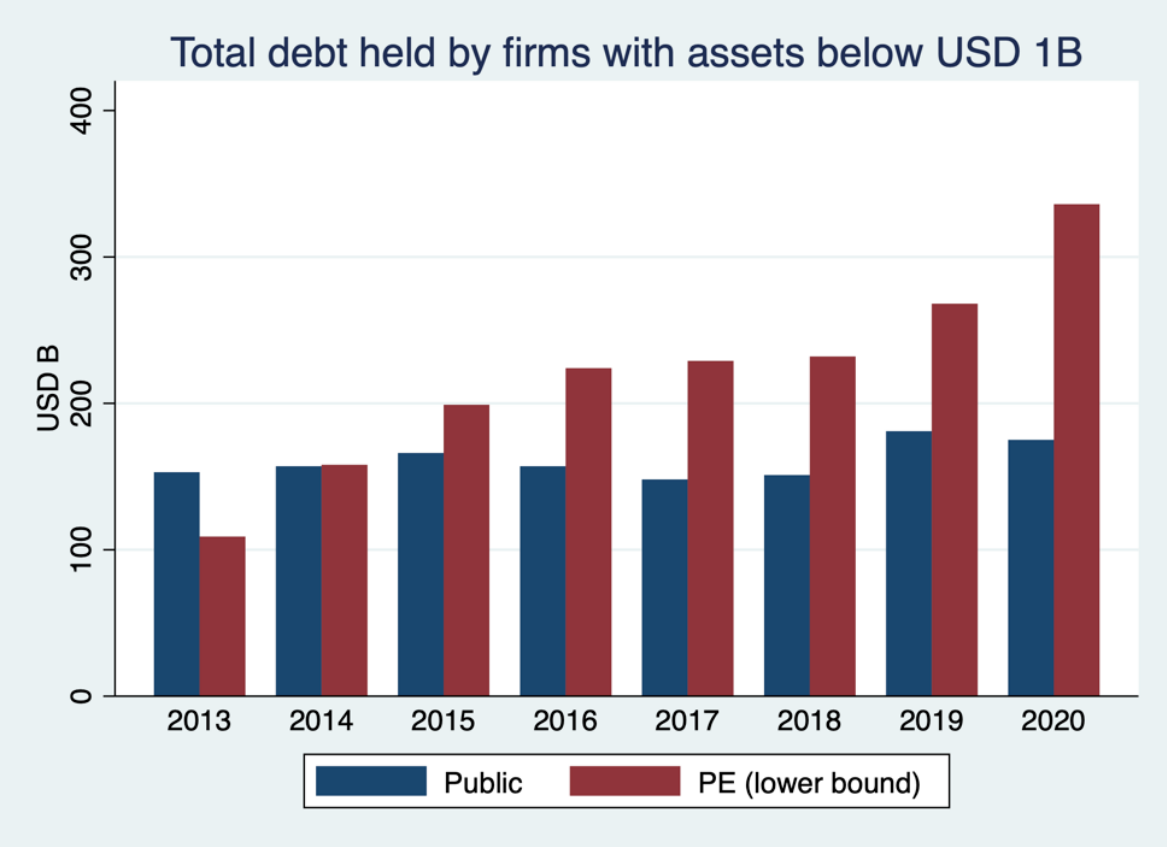
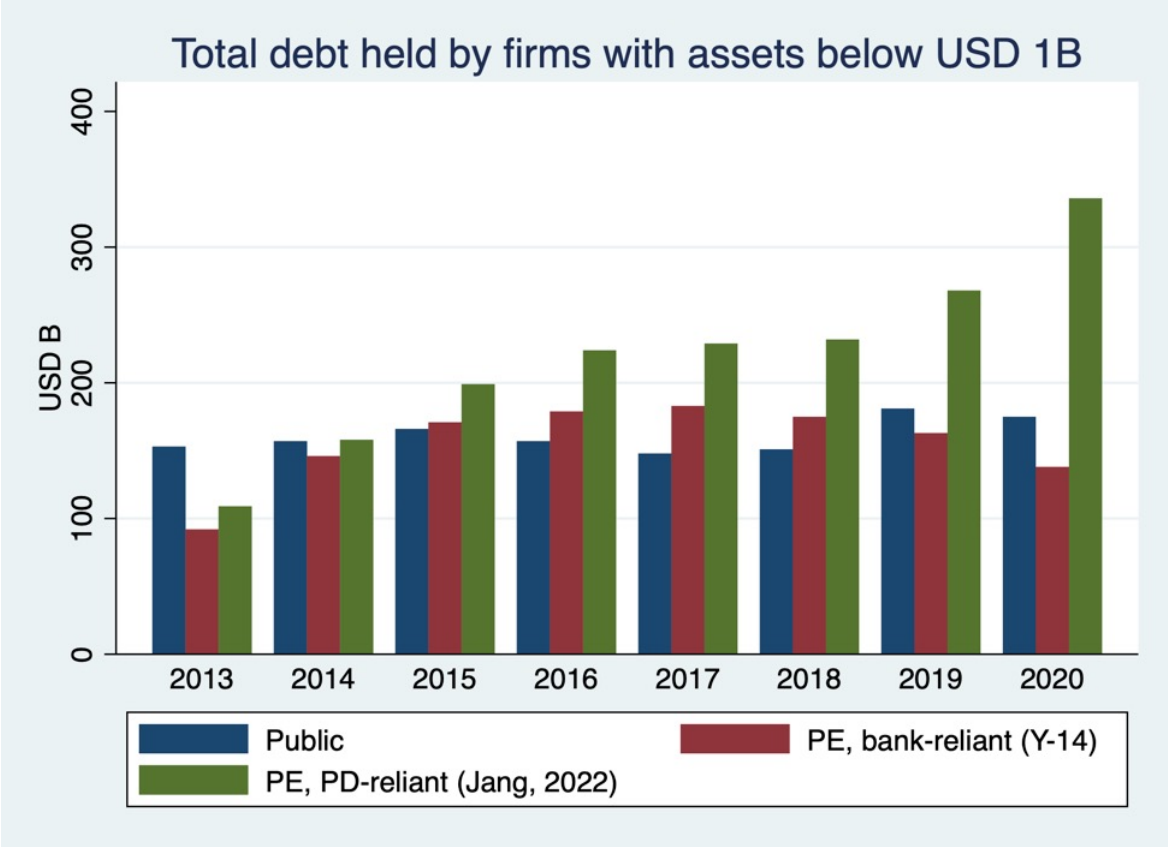
Chapter 7 conversion by firm size 1996-2005 (Bernstein et al 2019)

Employees in firm:	N Establishments	N Firms	% Liquidated
0-5	8,000	7,000	44
6-25	11,000	10,500	44
26-100	11,000	6,500	41
101-1000	22,000	3,000	29
1000	77,000	1,000	13

MM Debt Financing

- Definition varies: sales \$10M-1B, EBITDA < \$100M, assets \$50M-1B
- Equity ownership: Some public, but more private equity (PE) backed

MM Debt Financing



Source: Compustat, FR-Y14 (Haque Jang Mayer, 2023), proprietary database on private debt (Jang, 2022)
 PE (lower bound) = max(PE bank-reliant, PE PD-reliant)

MM Debt Financing

- Definition varies: sales \$10M-1B, EBITDA < \$100M, assets \$50M-1B
- Equity ownership: Some public, but more private equity (PE) backed
- More lender diversity than SMEs: beyond banks, nonbanks include
 - Finance companies, insurance companies, hedge funds
 - More common among public firms (Chernenko et al 2022)
 - Direct lenders: Private credit funds & Business Development Corps (BDC)
 - Private credit (aka private debt) fund: Financed via closed-end fund (like PE)
 - BDC: + public equity (like REITs) & asset-level fair value disclosure requirements
 - Middle-market Collateralized Loan Obligations (CLOs)

MM Debt Financing

Debt types and key contractual features differ by lender type!

- Banks provide both asset- & cash flow-based loans
 - Lian and Ma (2021); Gupta et al (2022)
- Direct lenders mostly provide cash flow-based loans with tighter covenants
 - Block Jang Kaplan Schulze (2022); Jang (2022)
- Other nonbanks more frequently pursue asset-based loans with less proactive covenant-based monitoring
 - Chernenko et al (2022); Gopal and Schnabl (2022)

MM: Bank-syndicated vs Direct Lending

- Since this is a restructuring course, we focus on those that provide cash flow-based debt: banks & direct lenders
 - Remember, asset-based loans are designed to be liquidated upon distress
- What is direct lending?
 - Rarely syndicated and held to maturity by 1-5 lenders
 - Mostly senior loans (term loan & revolver); 2nd lien & unitranche common
- In both bank-syndicated and direct lending, covenants are most important to monitor distress
 - Often no credit ratings and no active secondary markets

MM firm features & loan terms at origination (2013-19)

Loan Type:	Public-Bank	PE-Bank	PE-Direct
Assets (pre-deal, median; \$M)	850	363	174
EBITDA/Assets (pre-deal, median)	0.10	0.18	0.19
Debt/Assets (post-deal, median)	0.34	0.77	0.64
Debt/EBITDA (post-deal, median)	3.83	6.30	6.29
Loan size (median; \$M)	287	278	123
Maturity (median; years)	5	6	5
Spread (median; bps)	284	488	677
I(Financial covenant) (mean)	0.92	0.96	0.99
N(Financial covenant) (mean)	1.84	1.50	2.09
N(CF-based covenant) (mean)	1.45	1.26	1.59

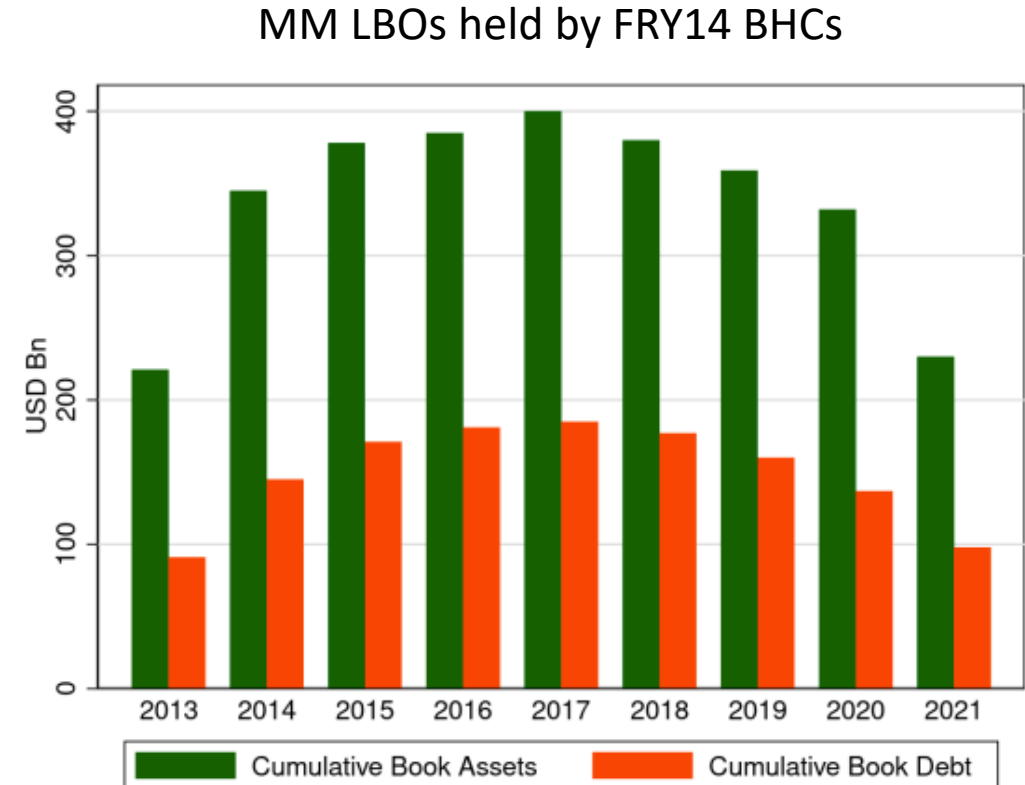
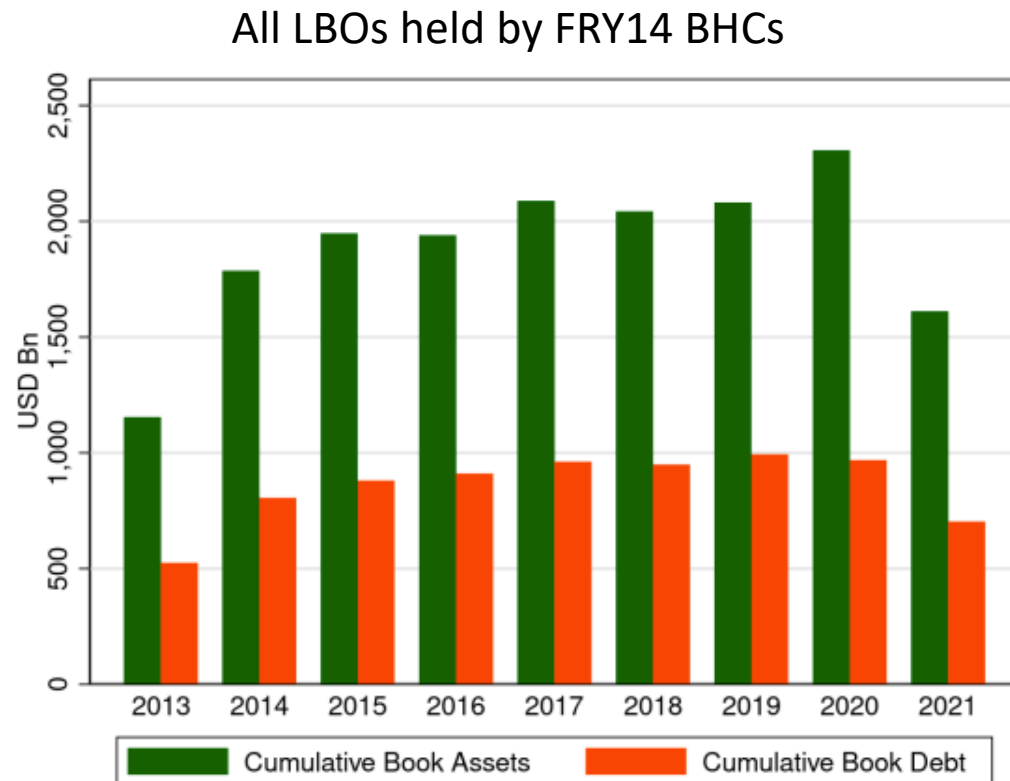
Source: Jang (2022)

- PE usually smaller, more profitable, more levered, and pay higher rates than public firms.
- Direct lenders target smaller firms, charge more, and require more covenants than banks.
- In all, financial covenants are almost always there.

MM: Bank-syndicated vs Direct Lending

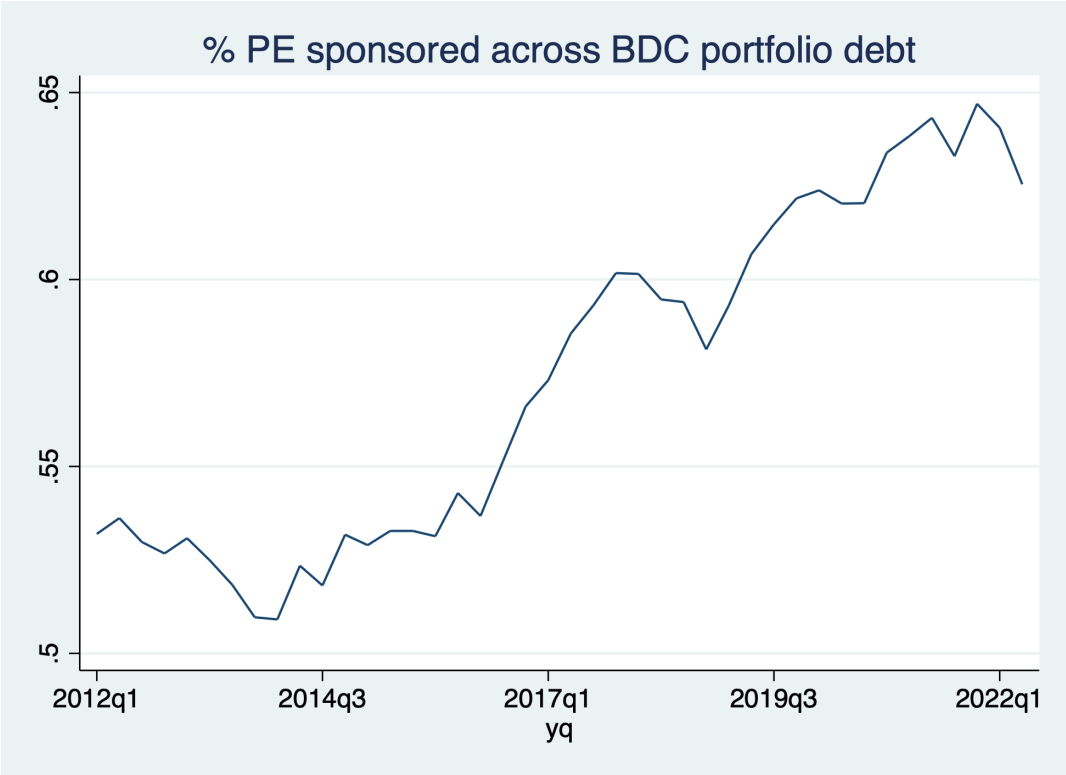
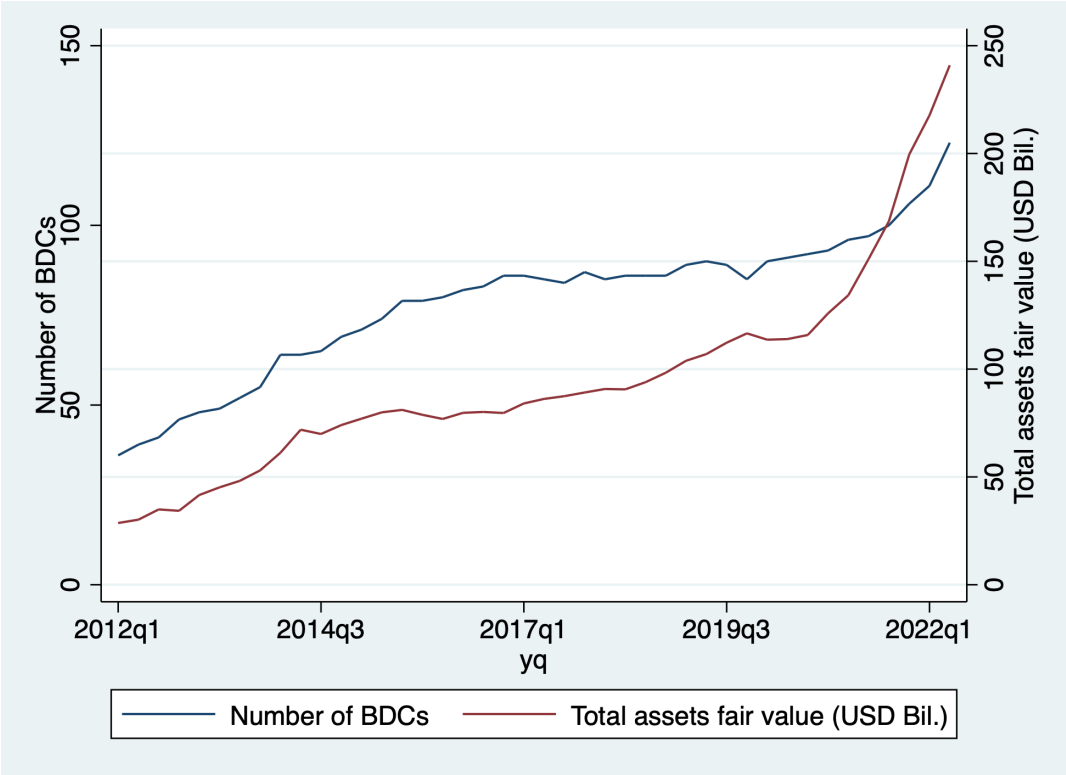
- Since this is a restructuring course, we focus on those that provide cash flow-based debt: banks & direct lenders
 - Remember, asset-based loans are designed to be liquidated upon distress
- What is direct lending?
 - Rarely syndicated and held to maturity by 1-5 lenders
 - Mostly senior loans (term loan & revolver); 2nd lien & unitranche common
- In both bank-syndicated and direct lending, covenants are most important to monitor distress
 - Often no credit ratings and no active secondary markets
- Post-GFC trend: **direct lenders replace banks, especially in MM LBOs**

Among LBOs, only MM shrinking in bank balance sheet



Note: Complete data coverage 2014-2020; Source: Haque Jang Mayer (2023)

MM LBO gap being replaced by direct lenders



Source: BDC Collateral, Pitchbook

Survey (Block Jang Kaplan Schulze 2022): 78% of direct lending is PE-sponsored

Why the Increase in Private Debt/Direct Lending?

- Bank consolidation & increased banking regulation
 - 2013 Leveraged Lending Guidance cautions debt/EBITDA > 6 or EBITDA < 0

Why the Increase in Private Debt/Direct Lending?

- Bank consolidation & increased banking regulation
 - 2013 Leveraged Lending Guidance cautions debt/EBITDA > 6 or EBITDA < 0
- Banks' reluctance to certain types of firms
 - Small size for bank syndication, low tangibility, low transparency
 - Preference for asset-based loans if lend to small firms

Why do banks would not want to finance companies that are reliant on private debt?

Answer choices	Europe		US	
	% of respondents	% of responses	% of respondents	% of responses
Tangibility: Firm has low amount of tangible assets as quality collateral	55.2%	22.2%	53.3%	19.8%
Profitability: Cash flow is too low or unstable	30.1%	12.1%	26.7%	9.9%
Size: Firm size is too small for bank syndication	52.4%	21.1%	70.0%	25.9%
Transparency: Due diligence is messy due to less clean financials or a lack of sophisticated internal systems	45.5%	18.3%	50.0%	18.5%
Specialization: Firms operating in niche sectors	37.8%	15.2%	23.3%	8.6%
Other/s	28.0%	11.2%	46.7%	17.3%

Source: Block Jang Kaplan Schulze (2022)

Banks avoid lending to small firms with lack of tangible assets and low transparency

Why the Increase in Private Debt/Direct Lending?

- Bank consolidation & increased banking regulation
 - 2013 Leveraged Lending Guidance cautions debt/EBITDA > 6 or EBITDA < 0
- Banks' reluctance to certain types of firms
 - Small size for bank syndication, low tangibility, low transparency
 - Preference for asset-based loans if lend to small firms
- Reliance of direct lenders on PE sponsors for deal flow

Why the Increase in Private Debt/Direct Lending?

- Bank consolidation & increased banking regulation
 - 2013 Leveraged Lending Guidance cautions debt/EBITDA > 6 or EBITDA < 0
- Banks' reluctance to certain types of firms
 - Small size for bank syndication, low tangibility, low transparency
 - Preference for asset-based loans if lend to small firms
- Reliance of direct lenders on PE sponsors for deal flow
- Direct lenders' advantage in providing customized needs
 - Stronger commitments, higher leverage, more effective covenants, and more flexible distress resolution

Why do firms choose private debt over bank debt?

Answer choices	Europe		US	
	% of respondents	% of responses	% of respondents	% of responses
Certainty and speed of execution (vs long / uncertain bank syndication process)	83.0%	23.8%	91.2%	23.1%
Stable relationship with lender's expectation to hold to maturity (vs bank originate-and-distribute model)	34.6%	9.9%	64.7%	16.4%
More flexible covenant structure	52.9%	15.2%	76.5%	19.4%
Diversification of financing sources	39.9%	11.4%	23.5%	6.0%
Longer investment horizon than banks are willing to support	39.2%	11.2%	26.5%	6.7%
Higher leverage than banks are willing to support	54.2%	15.5%	82.4%	20.9%
Did not approach banks due to fear of rejection	6.5%	1.9%	8.8%	2.2%
Bank loan application was rejected	28.8%	8.2%	5.9%	1.5%
Other/s	9.8%	2.8%	14.7%	3.7%

Source: Block Jang Kaplan Schulze (2022)

Direct lenders provide greater commitment, higher leverage, and more flexible covenant structure than bank-syndicated lending

COVID distress resolution

PE-backed firms with payment/covenant defaults (Mar 2020 – Mar 2021)

Source: Jang (2022)	(1) PE-Direct			(2) PE-Bank				
	N	mean	median	sd	N	mean	median	sd
COVID revenue growth	171	-0.153	-0.137	0.224	59	-0.179	-0.163	0.190
I(Payment default)	171	0.363	0.000	0.482	59	0.373	0.000	0.488
I(P&I deferral)	171	0.251	0.000	0.435	59	0.085***	0.000	0.281
I(Covenant renegotiation)	171	0.772	1.000	0.421	59	0.695	1.000	0.464
I(Restructuring)	171	0.123	0.000	0.329	59	0.305***	0.000	0.464
I(In-court restructuring)	171	0.029	0.000	0.169	59	0.153**	0.000	0.363
I(Out-of-court restructuring)	171	0.094	0.000	0.292	59	0.153	0.000	0.363
I(Sponsor equity injection)	171	0.398	0.000	0.491	59	0.220***	0.000	0.418
I(Sponsor exit)	171	0.111	0.000	0.315	59	0.237**	0.000	0.429
I(CEO turnover within 6 months)	171	0.064	0.000	0.246	59	0.034	0.000	0.183
I(CEO turnover within 1 year)	171	0.158	0.000	0.366	59	0.136	0.000	0.345

Compared to banks, direct lenders provide more flexibility (defer payment and interest obligations, renegotiate without restructuring, and avoid bankruptcy via out-of-court restructuring) while requiring greater skin-in-the-game from PE sponsors.

Key attributes by lender type

	Direct Lenders	Commercial Banks	CLOs	Finance Companies
Borrower type	Middle-market	All	Mostly large public, some middle-market	Mostly SME, some middle-market
Loan Characteristics				
Syndication	Not frequent	Frequent	Always	Likely not frequent
Loan type	Term loan / Revolver	Term loan / Revolver	Term loan	Revolver
CF vs asset-based	Mostly CF-based	Both	Mostly CF-based	Mostly asset-based
Covenants	Financial & Negative	Financial & Negative	Typically only negative ("Cov-lite")	N/A
Origination/liquidity	Mostly self-originated & held to maturity	Self-originated & sold off to institutional investors	Bought through primary market syndication or secondary market trading	N/A (likely self-originated)
Use of leverage (debt/capital)	< 50%	> 90%	> 90%	80-90%
Source of financing	Mostly equity, some bank debt	Mostly deposits and other short-term debt	Long term bonds, tranching by seniority	Mostly long-term debt, some commercial paper

Source: Block Jang Kaplan Schulze (2022)

Takeaways

- Debt, distress, restructuring of small, private firms
 - Small, private firms as important, if not more, as large, public firms for economic activity (employment, investments, and debt financing)
 - Different environment: bond issuance, trading, credit rating, accounting standardization all rare
 - Diverse nonbank lenders: direct lenders, finance companies, fintechs, etc
 - Banks continue to lose market share to nonbank lenders
- SME: asset-based loans and liquidation upon distress very common
- MM: CF-based loans with covenants and out-of-court restructuring becoming more common with growth in PE and direct lending

Referenced papers

- Bernstein, S., E. Colonnelli, and B. Iversen (2018). Asset allocation in bankruptcy. *Journal of Finance* 74, 5–53.
- Block, J., Y. S. Jang, S. N. Kaplan, and A. Schulze (2022). A survey of private debt funds. Working Paper.
- Chernenko, S., I. Erel, and R. Prilmeier (2022). Why do firms borrow directly from nonbanks? *Review of Financial Studies*.
- G. Chodorow-Reich, O. Darmouni, S. Luck, and M. Plosser. (2022) Bank liquidity provision across the firm size distribution. *Journal of Financial Economics*
- S. Davis, J. Haltiwanger, R. Jarmin, J. Miranda. (2007) Volatility and dispersion in business growth rates: Publicly traded versus privately held firms. *NBER Macroeconomics Annual*.
- Davydiuk, T., T. Marchuk, and S. Rosen (2022). Direct lenders in the U.S. middle market. Working Paper.
- Gopal, M. and P. Schnabl (2022). The rise of finance companies and fintech lenders in small business lending. *Review of Financial Studies*.
- Gupta, A., H. Sapriza, and V. Yankov (2022). The collateral channel and bank credit. Working Paper.
- Haque, S., Y. S. Jang, and S. Mayer (2023). Private equity and corporate borrowing constraints: Evidence from loan level data. Working Paper.
- Jang, Y. S. (2022). Five facts about direct lending to middle-market buyouts. Working Paper
- Lian, C. and Y. Ma (2021). Anatomy of corporate borrowing constraints. *The Quarterly Journal of Economics* 136 (1), 229–291.