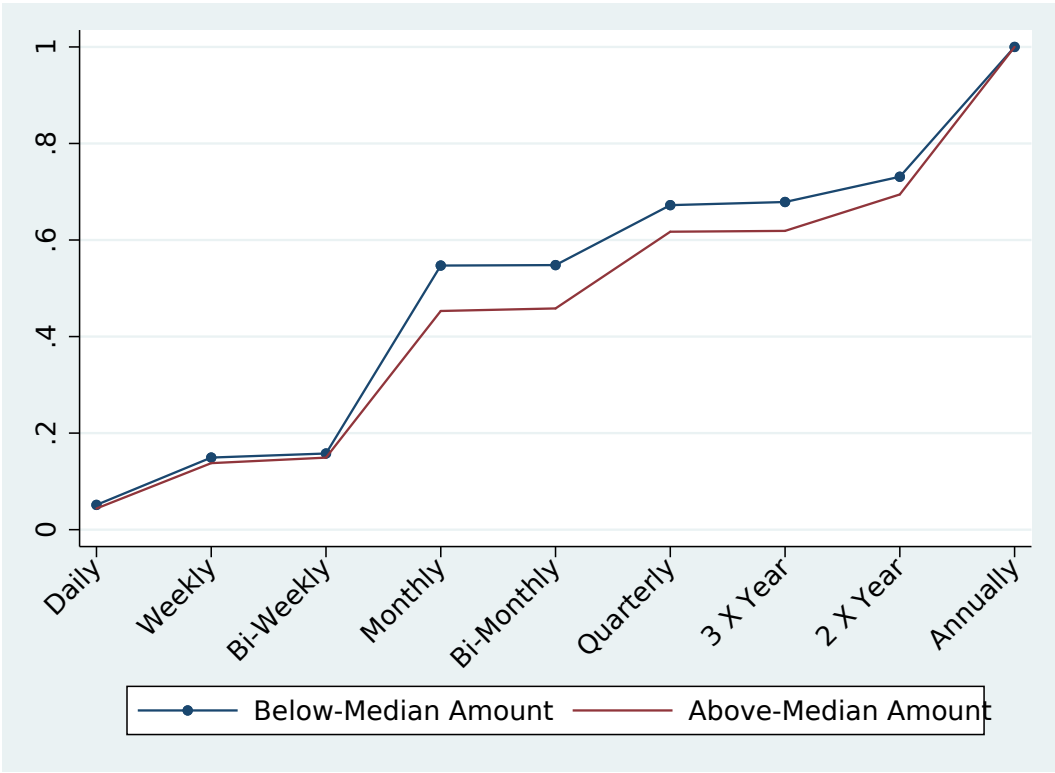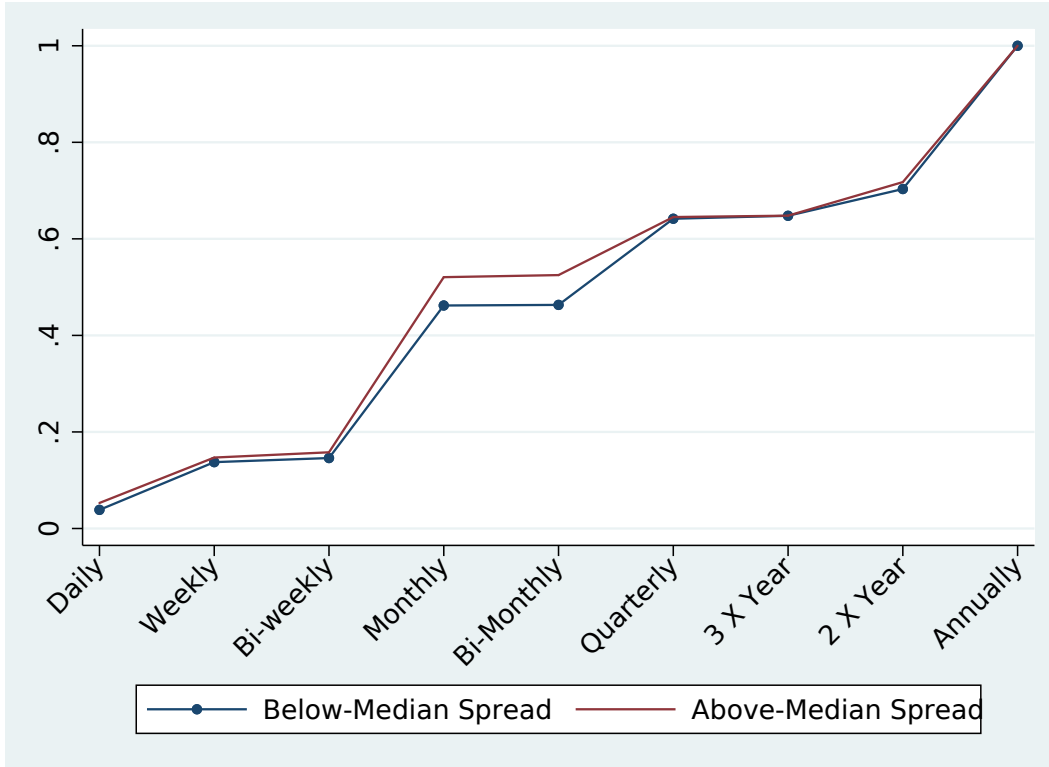# Appendices – For Online Publication

(a) *Monitoring Frequency and Loan Amount*

Fig. IA.1. Monitoring Frequency and Loan Amount: This figure plots the cumulative density function (CDF) of monitoring frequency partitioned by whether the loans are above or below median in loan amount. The x-axis plots monitoring frequency, thus a point on the figure corresponds to the percentage of loans that are monitored at least as frequently as the interval listed on the x-axis.

(a) *Monitoring Frequency and Loan Spread*

Fig. IA.2. Monitoring Frequency and Loan Spread: This figure plots the cumulative density function (CDF) of monitoring frequency partitioned by whether the loans are above or below median in loan spread. The x-axis plots monitoring frequency, thus a point on the figure corresponds to the percentage of loans that are monitored at least as frequently as the interval listed on the x-axis.
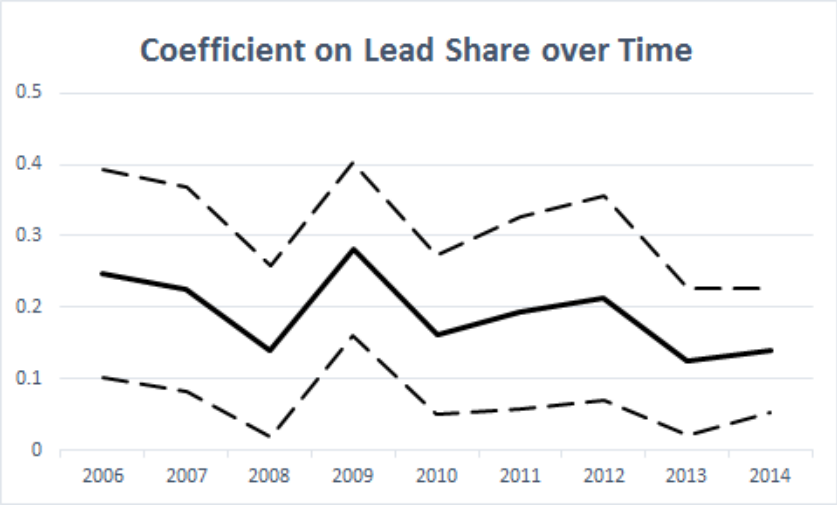
Fig. IA.3. Monitoring over Time: This figure plots the year-by-year coefficients from a regression of lead share on active monitoring.

Table IA.1:

Monitoring Matrix

This table presents a complete breakdown of bank monitoring frequencies (see column entries) conditional on a loan being monitored at the maximum frequencies indicated in each row. Loans in our sample are monitored daily, weekly, bi-weekly, monthly, bi-monthly, quarterly, three times a year, semi-annually, and annually.

	N	Daily	Weekly	Bi-Weekly	Monthly	Bi-Monthly	Quarterly	3 X Year	2 X Year	Annually
Daily	105	100.00%	15.24%	2.86%	27.62%	0.95%	11.43%	5.71%	5.71%	16.19%
Weekly	212		100.00%	0.00%	57.08%	0.00%	10.38%	6.60%	23.11%	36.32%
Bi-Weekly	22			100.00%	31.82%	0.00%	0.00%	0.00%	4.55%	9.09%
Monthly	763				100.00%	0.00%	8.39%	1.31%	6.29%	19.66%
Bi-Monthly	7					100.00%	0.00%	0.00%	0.00%	57.14%
Quarterly	314						100.00%	0.00%	2.55%	8.60%
3 X Year	9							100.00%	22.22%	0.00%
2 X Year	142								100.00%	61.97%
Annually	636									100.00%

Table IA.2:

Bank Monitoring and Spreads

This table reports OLS regression estimates for the relation between *Active Monitoring* or *Log(Monitoring Frequency)* and the natural log of loan spreads. Controls are the same as in table 3. The fixed effects structure for each regression is presented at the bottom of the table. All variables are described in Appendix A. Standard errors in columns 1-3 are clustered on the bank-year level. Standard errors are presented in parentheses below the corresponding coefficient with statistical significance denoted as follows: $*p < 0.10$, $** \ p < 0.05$, $*** \ p < 0.01$.

	Active Monitoring			Log(Monitoring Frequency)		
	(1)	(2)	(3)	(4)	(5)	(6)
Log(Spread)	−0.043***	−0.032***	−0.027**	0.149	0.179*	0.100
	(0.012)	(0.011)	(0.012)	(0.099)	(0.104)	(0.122)
Lead Share	0.276***	0.175***	0.146***	0.921***	0.292	0.620
	(0.043)	(0.040)	(0.048)	(0.280)	(0.364)	(0.487)
Public	−0.040***	−0.033***	−0.040***	−0.126	−0.051	−0.078
	(0.008)	(0.008)	(0.008)	(0.101)	(0.084)	(0.105)
Log(Maturity)	−0.115***	−0.090***	−0.075***	−0.222*	−0.307**	−0.324
	(0.017)	(0.017)	(0.020)	(0.128)	(0.144)	(0.191)
Number of Covenants	−0.013***	−0.016***	−0.016***	−0.116***	−0.114***	−0.096*
	(0.004)	(0.004)	(0.005)	(0.040)	(0.039)	(0.050)
High Volatility Collateral	−0.134***	−0.141***	−0.133***	0.390***	0.414***	0.438***
	(0.025)	(0.026)	(0.028)	(0.130)	(0.100)	(0.105)
Low Volatility Collateral	−0.051***	−0.039**	−0.029	−0.266***	−0.200**	−0.197*
	(0.017)	(0.019)	(0.021)	(0.081)	(0.088)	(0.109)
Lender Herfindahl	0.044	0.062	0.078	0.011	0.295	0.223
	(0.041)	(0.044)	(0.048)	(0.345)	(0.270)	(0.456)
Log(Committed)	0.007	0.009*	0.010**	0.007	0.018	0.072
	(0.005)	(0.005)	(0.004)	(0.048)	(0.049)	(0.048)
Term Loan	0.022*	0.016	0.017*	−0.116**	−0.112**	−0.207***
	(0.011)	(0.010)	(0.010)	(0.055)	(0.055)	(0.072)
Unsecured	−0.083***	−0.080***	−0.087***	−0.484*	−0.520*	−0.727***
	(0.024)	(0.029)	(0.030)	(0.285)	(0.266)	(0.225)
Adjusted R-Squared	0.224	0.262	0.281	0.194	0.275	0.308
Observations	12,685	12,685	10,314	1,407	1,407	1,195
Year Fixed Effects	YES	YES	YES	YES	YES	YES
Origination Year-Quarter Fixed Effects	YES	YES	YES	YES	YES	YES
Industry Fixed Effects	YES	YES	YES	YES	YES	YES
Examiner Ratings	YES	YES	YES	YES	YES	YES
Controls	YES	YES	YES	YES	YES	YES
Examiner-Scale Lead Bank Ratings	YES	YES	NO	YES	YES	NO
Lead Bank Fixed Effects	NO	YES	YES	NO	YES	YES
Lead Bank Internal Ratings	NO	NO	YES	NO	NO	YES

Table IA.3:

Bank Monitoring and Covenant Intensity

This table reports OLS regression estimates for the relation between *Active Monitoring* or *Log(Monitoring Frequency)* and covenant intensity as defined by the number of covenant types. Controls are the same as in table 3. All variables are described in Appendix A. Standard errors in columns 1-3 are clustered on the bank level. Standard errors are presented in parentheses below the corresponding coefficient with statistical significance denoted as follows: $*p < 0.10$, $**p < 0.05$, $***p < 0.01$.

	Log(Monitoring Frequency)				Active Monitoring			
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
Cov. Types = 1	−0.159	−0.087	−0.093	−0.059	−0.155***	−0.081***	−0.043***	−0.048***
	(0.109)	(0.121)	(0.093)	(0.112)	(0.023)	(0.013)	(0.009)	(0.012)
Cov. Types = 2	−0.511***	−0.491**	−0.377**	−0.330	−0.222***	−0.150***	−0.084***	−0.080***
	(0.147)	(0.172)	(0.147)	(0.195)	(0.028)	(0.021)	(0.013)	(0.018)
Cov. Types = 3	−0.585***	−0.553***	−0.438***	−0.358*	−0.218***	−0.152***	−0.089***	−0.085***
	(0.165)	(0.179)	(0.164)	(0.209)	(0.032)	(0.021)	(0.015)	(0.020)
Cov. Types = 4+	−0.398***	−0.352***	−0.274**	−0.131	−0.147***	−0.117***	−0.068***	−0.083***
	(0.128)	(0.124)	(0.116)	(0.093)	(0.034)	(0.024)	(0.022)	(0.022)
Adjusted R-Squared	0.025	0.161	0.274	0.330	0.038	0.193	0.351	0.328
Observations	2,210	2,210	2,210	1,713	19,729	19,729	19,729	14,539
Lead Bank Fixed Effects	NO	YES	YES	YES	NO	YES	YES	YES
Year Fixed Effects	NO	YES	YES	YES	NO	YES	YES	YES
Risk & Opacity Controls	NO	NO	YES	YES	NO	NO	YES	YES
Banks' Internal Ratings (Own Scale)	NO	NO	NO	YES	NO	NO	NO	YES

Table IA.4:

Bank Monitoring and Loan Outcomes: Private and Public Firms

This table presents OLS regression estimates of future loan outcomes (at time $t+1$) on indicators for active bank monitoring for private and public firms at time t. The regressions include year, origination quarter, industry, examiner and lead bank rating, as well as lead bank FEs. All variables are defined in Appendix A. Standard errors are presented in parentheses below the corresponding coefficient with statistical significance denoted as follows: $*p < 0.10$, $**p < 0.05$, $***p < 0.01$.

Panel A: Private Companies

	$Violation_{it+1}$	$Violation_{it+1}$	$Waiver_{it+1}$	$Waiver_{it+1}$	$Renegotiation_{it+1}$	$Renegotiation_{it+1}$
Active Monitoring	0.096***	0.096***	−0.027	−0.026	0.037**	0.047***
	(0.034)	(0.034)	(0.040)	(0.040)	(0.017)	(0.017)
Lead Share		0.129		0.049		−0.394***
		(0.079)		(0.051)		(0.079)
Adjusted R-Squared	0.213	0.214	0.262	0.262	0.051	0.067
Observations	2,930	2,930	1,515	1,515	6,832	6,832

Panel B: Public Companies

	$Violation_{it+1}$	$Violation_{it+1}$	$Waiver_{it+1}$	$Waiver_{it+1}$	$Renegotiation_{it+1}$	$Renegotiation_{it+1}$
Active Monitoring	0.127**	0.124**	0.054*	0.054*	−0.006	0.025
	(0.053)	(0.053)	(0.029)	(0.030)	(0.033)	(0.034)
Lead Share		0.201		0.028		−0.929***
		(0.127)		(0.059)		(0.158)
Adjusted R-Squared	0.209	0.211	0.222	0.221	0.032	0.080
Observations	2,053	2,053	759	759	4,258	4,258

Table IA.5:

Bank Monitoring and Covenant Types

This table reports OLS regression estimates for the relation between *Active Monitoring* or *Log(Monitoring Frequency)* and specific covenant types and interactions with the lead share. Standard errors are presented in parentheses below the corresponding coefficient with statistical significance denoted as follows: $*p < 0.10$, $** p < 0.05$, $*** p < 0.01$.

	(1)	(2)	(3)	(4)
	Monitoring Frequency		*Active Monitoring*	
Lead Share	0.410	0.127	0.166***	0.288***
	(0.263)	(0.342)	(0.034)	(0.058)
CAPEX	0.023	0.118	−0.014	−0.010
	(0.100)	(0.083)	(0.010)	(0.012)
Cash Flow	−0.397***	−0.508***	−0.101***	−0.069***
	(0.079)	(0.112)	(0.013)	(0.013)
Net Worth	−0.050	0.106	0.038***	0.038
	(0.126)	(0.203)	(0.014)	(0.027)
DA	−0.347*	−0.488	0.139***	0.161**
	(0.185)	(0.382)	(0.037)	(0.062)
BB	0.170	0.205	−0.013	0.000
	(0.105)	(0.148)	(0.025)	(0.031)
CASH	0.095	0.416*	0.067***	0.030
	(0.135)	(0.215)	(0.024)	(0.041)
CURRENT	−0.147	−0.166	0.057**	0.174***
	(0.166)	(0.221)	(0.023)	(0.035)
COV	−0.079	−0.203*	−0.014	−0.011
	(0.096)	(0.109)	(0.009)	(0.010)
DCAP	−0.310	−0.257	−0.022	0.018
	(0.269)	(0.714)	(0.049)	(0.063)
DIST	0.002	−0.202	−0.001	0.005
	(0.108)	(0.159)	(0.012)	(0.021)
CAPEX × Lead Share		−0.459		−0.017
		(0.342)		(0.044)
Cash Flow × Lead Share		0.480		−0.162***
		(0.378)		(0.058)
Net Worth × Lead Share		−0.625		0.008
		(0.433)		(0.085)
DA × Lead Share		0.527		−0.081
		(1.438)		(0.142)
BB × Lead Share		−0.190		−0.058
		(0.483)		(0.124)
CASH × Lead Share		−1.295*		0.141
		(0.730)		(0.147)
CURRENT × Lead Share		0.091		−0.518***
		(0.827)		(0.138)
COV × Lead Share		0.491		−0.021
		(0.317)		(0.045)
DCAP × Lead Share		−0.461		−0.208
		(2.990)		(0.246)
DIST × Lead Share		0.813*		−0.023
		(0.421)		(0.075)
Adjusted R-squared	0.283	0.286	0.364	0.366
Oberservations	2,210	2,210	19,729	19,729