Internet Appendix

This internet appendix contains additional analyses, such as robustness checks to compliment the analyses in the paper. To conserve space in the paper, we incorporate these tables in the internet appendix. The findings are referred in the paper at various places.

Table IA1: The Impact of exogenous analyst loss on information asymmetry (Illiquidity)

	Bid-Ask Spread	Ln(Amihud *1000)
Treat* Post	**0.020*** **	**0.137*** **
	[0.005]	**[0.043]**
Treat	-0.008***	-0.051
	[0.003]	[0.031]
Post	0.022	0.221
	[0.025]	[0.188]
Size	-0.024	-0.583***
	[0.015]	[0.090]
Q	-0.027***	-0.468***
	[0.008]	[0.059]
ROA	-0.293***	-2.739***
	[0.081]	[0.454]
Tangibility	0.105***	0.665***
	[0.026]	[0.182]
Rating	0.002	0.044
	[0.004]	0.137***
Firm Fixed Effects	Yes	Yes
Year Fixed Effects	Yes	Yes
Observations	6,321	6,321
Adjusted R-squared	0.729	0.931

Notes. This table reports the impact of exogenous analyst loss on treated firms' liquidity and bid-ask spread. Specifically, we examine the impact of exogenous analyst coverage loss on illiquidity (Ln(Amihud*1000)) and bid-ask spread. *Treated* is a dummy variable equal to 1 if the firm has experienced an exogenous drop in analyst coverage and equal to zero otherwise. *Post* is a dummy equal to 1 for the year after the shock and equal to 0 otherwise. Definitions of other variables are given in Appendix A of the paper. The estimations correct error structure for heteroskedasticity and within-firm and year error clustering, with standard errors reported in brackets. *, **, and *** denote statistical significance at 10%, 5% and 1% level, respectively.

Table IA2: The impact of exogenous drop of analyst on firms' financing choice --- Evidence from extended sample regression

	(1) Bank/AT %	(2) Bond/AT %	(3) Equity/AT %
Treat	-0.433	0.519	0.378
	[0.256]	[0.386]	[0.330]
Year $_{t-2}$	0.459***	0.621***	0.044
	[0.058]	[0.146]	[0.080]
Treat * Year $_{t-2}$	0.094	-0.059	0.047
	[0.089]	[0.275]	[0.109]
Year $_{t-3}$	1.059***	1.098***	0.027
	[0.120]	[0.237]	[0.184]
Treat * Year $_{t-3}$	-0.182	0.222	0.151
	[0.177]	[0.401]	[0.136]
Year $_{t+1}$	0.490	1.117**	-1.441*
	[0.427]	[0.413]	[0.689]
Treat * Year $_{t+1}$	**0.788****	**-0.526***	**-1.260*****
	[0.326]	**[0.295]**	**[0.327]**
Year $_{t+2}$	0.332	1.097***	-1.433*
	[0.429]	[0.359]	[0.707]
Treat * Year $_{t+2}$	**0.814*****	**-0.673***	**-1.300*****
	[0.278]	**[0.338]**	**[0.340]**
Year $_{t+3}$	0.400	1.074**	-1.217*
	[0.500]	[0.437]	[0.695]
Treat * Year $_{t+3}$	**0.831****	**-0.706****	**-1.116*****
	[0.343]	**[0.278]**	**[0.296]**
Controls	Yes	Yes	Yes
Firm Fixed Effects	Yes	Yes	Yes
Year Fixed Effects	Yes	Yes	Yes
Observations	16,948	16,948	16,942
Adjusted R-squared	0.812	0.842	0.919

Notes. This table presents the change regression results for our treated firms and their matched control firms. Our sample contains 16,948 (16,942) firm-year observations from 1,683 U.S. publicly traded firms. Bank/AT % is defined as the amount of revolving credit and term loans as a percentage of total assets. Bond/AT % is defined as the amount of senior and junior bonds as a percentage of total assets. Equity/AT % is defined as the amount of common equity as a percentage of total assets. *Treated* is a dummy variable equals to 1 if the firm has experienced an exogenous drop in analyst coverage. Year$_{-3}$, Year$_{-2}$, Year$_{+1}$, Year$_{+2}$, Year$_{+3}$ are year dummy variables. Definitions of other control variables are given in Appendix A of the paper. The estimations correct error structure for heteroskedasticity and within-firm and year error clustering, with standard errors reported in brackets. *, **, and *** denote statistical significance at 10%, 5% and 1% level, respectively.

Table IA3: Removing the sample after 2008

	Bank/AT %	Bond/AT %	Equity/AT %
Treat* Post	**0.650****	**-0.780****	**-1.100***
	[0.289]	**[0.345]**	**[0.575]**
Treat	-0.489**	0.882**	0.604
	[0.220]	[0.339]	[0.556]
Post	0.861***	0.441	-2.897**
	[0.190]	[0.443]	[0.968]
Size	-1.795**	-4.490***	-13.504***
	[0.792]	[0.837]	[1.816]
Q	-0.455	0.202	4.394***
	[0.379]	[0.642]	[1.040]
ROA	3.005	0.963	70.571***
	[3.780]	[4.697]	[10.815]
Tangibility	8.701***	7.008*	0.597
	[2.616]	[3.324]	[6.472]
Rating	1.044**	-0.586	0.237
	[0.420]	[0.512]	[0.660]
Firm Fixed Effects	Yes	Yes	Yes
Year Fixed Effects	Yes	Yes	Yes
Observations	5,268	5,268	5,268
Adjusted R-squared	0.769	0.824	0.853

Notes. This table reports the results of the analysis excluding data from 2008 to 2010. It reports the DID regressions examining the effect of an exogenous drop in financial analysts on firms' financing choice after removing samples after 2008. Bank/AT % is defined as the amount of revolving credit and term loans as a percentage of total assets. Bond/AT % is defined as the amount of senior and junior bonds as a percentage of total assets. Equity/AT % is defined as the amount of common equity as a percentage of total assets. *Treated* is a dummy variable equal to 1 if the firm has experienced an exogenous drop in analyst coverage and equal to 0 otherwise. *Post* is a dummy equal to 1 for the year after the shock and 0 otherwise. Definitions of other variables are given in Appendix A. The estimations correct the error structure for heteroskedasticity and within-firm and year error clustering, with standard errors reported in brackets. *, **, and *** denote statistical significance at 10%, 5%, and 1% levels, respectively.

Table IA4: Subsample analysis focus on low analyst coverage group

Panel A: Impact on Asset Structure			
	Bank/AT %	Bond/AT %	Equity/AT %
Treat* Post	**1.183****	**-1.391***	**-2.252*****
	[0.509]	**[0.762]**	**[0.732]**
Treat	-0.239	1.331	0.994
	[0.416]	[0.779]	[0.880]
Post	-0.502	0.639	-3.741**
	[0.628]	[0.719]	[1.561]
Size	2.519*	0.484	-2.616
	[1.217]	[1.787]	[1.822]
Q	-1.519**	-0.159	2.469
	[0.707]	[1.102]	[1.608]
ROA	-11.114	-1.264	56.751***
	[8.269]	[10.943]	[18.497]
Tangibility	3.346	-11.280**	-20.861**
	[4.596]	[4.784]	[7.319]
Rating	0.411	0.047	0.105
	[0.397]	[0.405]	[0.542]
Firm Fixed Effects	Yes	Yes	Yes
Year Fixed Effects	Yes	Yes	Yes
Observations	4,345	4,345	4,345
Adjusted R-squared	0.785	0.839	0.842

Panel B: Impact on Issuance			
	(1)	(2)	(3)
	Bank Loan	Bond	Equity
Treat* Post	**1.191****	**-0.370*****	**-1.071****
	[0.589]	**[0.100]**	**[0.526]**
Treat	-0.396	0.030	0.446
	[0.407]	[0.066]	[0.344]
Post	-0.326	0.077	-0.294
	[0.302]	[0.084]	[0.304]
Size	1.841**	-0.100	-0.835
	[0.857]	[0.173]	[1.387]
Q	0.609	-0.032	2.088***
	[0.410]	[0.087]	[0.613]
ROA	-7.441	3.172**	-14.636***
	[6.976]	[1.305]	[4.221]
Tangibility	3.538	-0.322	5.627
	[3.340]	[0.523]	[8.812]
Rating	0.406	0.051	0.449
	[0.288]	[0.062]	[0.401]
Firm Fixed Effects	Yes	Yes	Yes
Year Fixed Effects	Yes	Yes	Yes
Observations	4,345	4,345	4,345
Adjusted R-squared	0.123	0.318	0.247

Panel C: Debt Components					
	(1) Revolving Credit	(2) Term Loan	(3) Subordinated Bond	(4) Senior Bond	(5) Long-term Debt
Treat* Post	**0.732****	**0.111**	**-0.587***	**0.010**	**-1.871****
	[0.348]	**[0.368]**	**[0.355]**	**[0.441]**	**[0.775]**
Treat	-0.183	0.105	-0.030	1.153*	0.045
	[0.336]	[0.175]	[0.233]	[0.596]	[0.978]
Post	-0.594*	0.217	-0.077	0.710	-0.369
	[0.353]	[0.221]	[0.099]	[0.514]	[0.415]
Size	1.813	0.989	-0.116	0.279	-4.470
	[1.105]	[0.818]	[0.573]	[1.825]	[2.771]
Q	-0.789	-0.873	-0.073	-0.405	-0.025
	[0.770]	[0.567]	[0.337]	[1.134]	[1.185]
ROA	-6.627	-2.079	-0.430	-5.769	22.637
	[8.620]	[2.807]	[3.323]	[6.809]	[15.081]
Tangibility	3.780	0.598	-0.498	-10.903**	-21.117
	[4.091]	[2.610]	[2.053]	[4.779]	[12.596]
Rating	0.349	-0.101	-0.010	0.103	-0.089
	[0.262]	[0.155]	[0.123]	[0.278]	[0.640]
Firm Fixed Effects	Yes	Yes	Yes	Yes	Yes
Year Fixed Effects	Yes	Yes	Yes	Yes	Yes
Observations	4,345	4,345	4,345	4,345	2,710
Adjusted R-squared	0.776	0.711	0.857	0.838	0.703

Notes. This table presents the impact of an exogenous drop in analyst coverage on asset structure, issuance and debt components in Panel A, B and C, respectively. We focus on the low number initial analyst subsample (below the median) to conduct the subsample analysis. *Treated* is a dummy variable equal to 1 if the firm has experienced an exogenous drop in analyst coverage and 0 otherwise *Post* is a dummy equal to 1 for the year after the shock and 0 otherwise. Other variables are defined in Appendix A of the paper. The estimations correct the error structure for heteroskedasticity and within-firm and year error clustering, with standard errors reported in brackets. *, **, and *** denote statistical significance at the 10%, 5%, and 1% levels, respectively.

Table IA5: Impact of exogenous drop in analyst coverage on firms' financing choice—The role of firms' idiosyncratic risk

	Idiosyncratic Risk					
	Bank/AT %		Bond /AT %		Equity/AT %	
	High	Low	High	Low	High	Low
Treat* Post	**0.932*** **	**0.215**	**-1.054** **	**-0.204**	**-2.092** **	**-0.729**
	[0.324]	**[0.212]**	**[0.435]**	**[0.273]**	**[0.880]**	**[0.496]**
Treat	-0.173	-0.103	1.225**	0.460	1.409	0.158
	[0.399]	[0.321]	[0.462]	[0.322]	[1.066]	[0.492]
Post	0.255	0.288	0.329	0.596*	-2.186*	-2.051*
	[0.372]	[0.314]	[0.321]	[0.314]	[1.158]	[1.107]
Size	-1.412	0.501	-4.002***	-4.260***	-10.853***	-9.202***
	[1.078]	[0.636]	[0.897]	[1.227]	[2.384]	[1.981]
Q	-0.352	-0.273	0.461	-1.369	3.896***	1.093
	[0.305]	[0.397]	[0.384]	[0.849]	[1.037]	[1.409]
ROA	0.639	-1.176	-11.509*	0.856	66.577***	50.563***
	[2.324]	[4.228]	[6.541]	[5.551]	[9.849]	[13.970]
Tangibility	4.216	6.090*	4.644	5.166	9.827	11.220
	[2.917]	[2.994]	[4.786]	[3.846]	[5.853]	[11.341]
Rating	0.231	0.003	-1.536*	-0.010	0.727	-0.885**
	[0.528]	[0.277]	[0.834]	[0.306]	[0.842]	[0.412]
	Treat* Post Difference					
Difference	0.717***		-0.850**		-1.363*	
p-value	0.01		0.02		0.08	
Firm Fixed Effects	Yes	Yes	Yes	Yes	Yes	Yes
Year Fixed Effects	Yes	Yes	Yes	Yes	Yes	Yes
Observations	4,225	4,128	4,225	4,128	4,225	4,128
Adjusted R-squared	0.751	0.794	0.835	0.872	0.829	0.908

Notes. This table reports the results of the DID regressions examining the effect of exogenous drop in financial analysts on firms' financing choice, conditional on firms' idiosyncratic risk. Firm idiosyncratic risk is defined as the standard deviation of the residual from the CAPM model, following Ang et al. (2006). Bank/AT % is defined as the amount of revolving credit and term loans as a percentage of total assets. Bond/AT % is defined as the amount of senior and junior bonds as a percentage of total assets. Equity/AT % is defined as the amount of common equity as a percentage of total assets. *Treated* is a dummy variable equal to 1 if the firm has experienced an exogenous drop in analyst coverage and 0 otherwise *Post* is a dummy equal to 1 for the year after the shock and 0 otherwise. Definitions for other variables are given in Appendix A of the paper. The estimations correct error structure for heteroskedasticity and within-firm and year error clustering, with standard errors reported in brackets. *, **, and *** denote statistical significance at 10%, 5% and 1% level, respectively.

Table IA6: Impact of exogenous drop in analyst coverage on the cost of bank debt

	Ln(Spread)
Treat* Post	**0.060**
	[0.072]
Treat	0.017
	[0.068]
Post	0.142
	[0.118]
Size	-0.052
	[0.123]
Q	-0.277***
	[0.088]
ROA	-0.651
	[0.901]
Tangibility	-0.130
	[0.406]
Rating	0.106
	[0.064]
Firm Fixed Effects	Yes
Year Fixed Effects	Yes
Observations	2,747
Adj. R^2	0.759

Notes. This table presents the impact of an exogenous drop in analyst coverage on the cost of bank loan. We focus on the bank loan spread (all-in spread drawn of the loan with highest amount in year t). We take the natural logarithm of the loan spread to mitigate the effect of skewness. *Treated* is a dummy variable equal to 1 if the firm has experienced an exogenous drop in analyst coverage and 0 otherwise. *Post* is a dummy equal to 1 for the year after the shock and 0 otherwise. Other variables are defined in Appendix A of the paper. The estimations correct the error structure for heteroskedasticity and within-firm and year error clustering, with standard errors reported in brackets. *, **, and *** denote statistical significance at the 10%, 5%, and 1% levels, respectively.

Table IA7: Impact of an exogenous drop in analyst coverage on the covenants and syndication of bank debt

	(1) log(number of lenders)	(2) log(number of lead arranger)	(3) Financial covenant number	(4) log(number of lenders)	(5) log(number of lead arranger)	(6) Financial covenant number
Treat* Post	**0.129***	**0.089**	**-0.230**	**0.209*****	**0.144****	**-0.036**
	[0.065]	**[0.077]**	**[0.232]**	**[0.065]**	**[0.057]**	**[0.210]**
Treat	-0.138**	-0.089	0.059	-0.080	-0.059	0.018
	[0.065]	[0.067]	[0.122]	[0.064]	[0.070]	[0.092]
Post	0.144**	0.214***	0.238**	0.045	0.179***	0.199*
	[0.068]	[0.061]	[0.085]	[0.071]	[0.053]	[0.099]
Size	-0.210	-0.004	-0.111	0.157***	0.181***	-0.395***
	[0.234]	[0.162]	[0.386]	[0.023]	[0.022]	[0.058]
Q	0.021	-0.030	0.365	-0.050	0.048	-0.278**
	[0.117]	[0.080]	[0.233]	[0.082]	[0.036]	[0.104]
ROA	-0.300	0.533	0.854	3.310***	1.412***	2.903**
	[1.035]	[0.599]	[1.787]	[0.638]	[0.292]	[1.291]
PPE	-0.050	-0.040	-0.782	-0.217	-0.012	0.017
	[0.554]	[0.413]	[1.291]	[0.136]	[0.097]	[0.287]
Rating	-0.356***	-0.138*	-0.144	-0.004	0.049**	-0.006
	[0.080]	[0.075]	[0.226]	[0.027]	[0.023]	[0.036]
Firm Fixed Effects	Yes	Yes	Yes			
Industry Fixed Effects				Yes	Yes	Yes
Year Fixed Effects	Yes	Yes	Yes	Yes	Yes	Yes
Observations	3,513	3,500	3,551	3,551	3,551	3,551
Adjusted R-squared	0.540	0.623	0.635	0.233	0.242	0.268

Notes. This table presents the impact of an exogenous drop in analyst coverage on the covenants and syndication of bank debt. We take log transformation for number of lenders and number of lead arrangers. Financial covenant number is the number of financial covenants in a loan contract. *Treated* is a dummy variable equal to 1 if the firm has experienced an exogenous drop in analyst coverage and 0 otherwise. *Post* is a dummy equal to 1 for the year after the shock and 0 otherwise. Other variables are defined in Appendix A of the paper. The estimations correct the error structure for heteroskedasticity and within-firm and year error clustering, with standard errors reported in brackets. *, **, and *** denote statistical significance at the 10%, 5%, and 1% levels, respectively.