

**On-line Appendix to  
“Which Financial Frictions? Parsing the  
Evidence from the Financial Crisis of  
2007-9”**

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Table IA.1. **Characteristics of new issuances (selected quarters, private firms).** This table presents means aggregated across all firms of new debt issuances. Loan and bond issuances refer to non-financial US private issuers. There are 2,120 loan issuances (corresponding to 1,005 unique borrowers) and 672 bond issuances (408 unique borrowers). Amount is expressed in January 1998 constant \$bln, cost is expressed in bps, and maturity is expressed in months. For loan issuances we report the total amount as well as the split between credit lines ([CL]) and term loans ([TL]).

	Amount (total)		Amount (average)		Issuances #	Cost	Maturity
Loan issuances							
	[CL]	[TL]					
Q2:2007	40.16	37.06	2.64	0.543	74	53.87	47.59
Q2:2009	11.63	8.45	2.85	0.155	75	260.39	17.54
Bond issuances							
Q2:2007	2.76			0.251	11	273.69	102.89
Q2:2009	3.06			0.255	12	465.13	85.35

Table IA.2. **Corporate financing choices and bank credit supply contraction/1.** This table presents logit regression results to explain corporate financing choices. Firms that simultaneously issue loan(s) and bond(s) in the same quarter are excluded (191 firm-quarter observations). Table 6 contains the detailed description.

	Dep. variable: Prob. of bond vs. loan issuance			
	(1)	(2)	(3)	(4)
Bank credit supply		Crisis	BD leverage	EBP
Panel A: logit regressions				
Size	0.384*** (0.044)	0.364*** (0.044)	0.393*** (0.044)	0.381*** (0.045)
Tobin's Q	0.086 (0.078)	0.087 (0.079)	0.144* (0.080)	0.106 (0.079)
Tangibility	-0.247 (0.223)	-0.266 (0.221)	-0.220 (0.225)	-0.218 (0.229)
Rating	0.056*** (0.020)	0.059*** (0.020)	0.051** (0.020)	0.046** (0.021)
Profitability	11.368*** (2.620)	11.052*** (2.618)	11.625*** (2.613)	12.413*** (2.656)
Leverage	0.963*** (0.264)	1.033*** (0.263)	0.830*** (0.273)	0.840*** (0.267)
Bank credit supply		0.608*** (0.090)	-0.010*** (0.001)	0.579*** (0.047)
Observations	4,085	4,085	4,085	3,972
Pseudo R-squared	0.077	0.084	0.091	0.104
Panel B: changes in implied probabilities				
Size	0.346	0.329	0.353	0.338
Tobin's Q	0.038	0.038	0.064	0.046
Tangibility	-0.041	-0.043	-0.035	-0.035
Rating	0.119	0.126	0.109	0.095
Profitability	0.161	0.157	0.165	0.173
Leverage	0.116	0.125	0.100	0.100
Bank credit supply	-	0.135	-0.195	0.231

Table IA.3. **Corporate financing choices and bank credit supply contraction/2.** This table presents logit regression results to explain corporate financing choices. All specifications include (Fama-French 48) industry fixed effects. Table 6 contains the detailed description.

	Dep. variable: Prob. of bond vs. loan issuance			
	(1)	(2)	(3)	(4)
Bank credit supply		Crisis	BD	EBP
			leverage	
	Panel A: logit regressions			
Size	0.347*** (0.043)	0.322*** (0.044)	0.355*** (0.042)	0.337*** (0.044)
Tobin's Q	-0.121* (0.073)	-0.119 (0.074)	-0.056 (0.074)	-0.091 (0.073)
Tangibility	0.777*** (0.257)	0.788*** (0.255)	0.767*** (0.259)	0.736*** (0.267)
Rating	0.104*** (0.020)	0.108*** (0.020)	0.099*** (0.019)	0.097*** (0.020)
Profitability	5.949** (2.533)	5.931** (2.528)	6.284** (2.521)	7.391*** (2.565)
Leverage	1.233*** (0.273)	1.250*** (0.274)	1.104*** (0.278)	1.065*** (0.274)
Bank credit supply		0.591*** (0.095)	-0.008*** (0.001)	0.565*** (0.049)
Observations	3,840	3,840	3,840	3,728
Pseudo R-squared	0.099	0.106	0.111	0.125
	Panel B: changes in implied probabilities			
Size	0.336	0.314	0.344	0.324
Tobin's Q	-0.058	-0.057	-0.027	-0.043
Tangibility	0.141	0.143	0.139	0.131
Rating	0.247	0.256	0.235	0.228
Profitability	0.091	0.091	0.095	0.110
Leverage	0.164	0.166	0.146	0.139
Bank credit supply	—	0.138	-0.181	0.238

Table IA.4. **Corporate financing choices and bank credit supply contraction/3.** Logit regression results to explain corporate financing choices. Firm characteristics are measured eight quarters prior to debt issuance. Table 6 contains the detailed description.

	Dep. variable: Prob. of bond vs. loan issuance			
	(1)	(2)	(3)	(4)
Bank credit supply		Crisis	BD leverage	EBP
Panel A: logit regressions				
Size	0.406*** (0.043)	0.380*** (0.044)	0.405*** (0.043)	0.402*** (0.044)
Tobin's Q	0.217*** (0.065)	0.193*** (0.065)	0.216*** (0.066)	0.197*** (0.067)
Tangibility	-0.155 (0.220)	-0.179 (0.217)	-0.146 (0.222)	-0.179 (0.232)
Rating	0.006 (0.020)	0.017 (0.020)	0.010 (0.020)	0.003 (0.021)
Profitability	13.805*** (2.508)	13.346*** (2.561)	14.034*** (2.515)	14.135*** (2.653)
Leverage	0.488* (0.268)	0.731*** (0.266)	0.444 (0.273)	0.513* (0.270)
Bank credit supply		0.704*** (0.094)	-0.008*** (0.001)	0.601*** (0.048)
Observations	3,838	3,838	3,838	3,705
Pseudo R-squared	0.075	0.085	0.086	0.107
Panel B: changes in implied probabilities				
Size	0.357	0.335	0.355	0.346
Tobin's Q	0.111	0.099	0.111	0.100
Tangibility	-0.026	-0.028	-0.023	-0.028
Rating	0.013	0.034	0.021	0.005
Profitability	0.189	0.182	0.191	0.189
Leverage	0.055	0.083	0.051	0.056
Bank credit supply		0.156	-0.163	0.236

Table IA.5. **Sensitivity of firm characteristics during the crisis.** This table presents logit regression results to explain the sensitivity of corporate financing choices to firm characteristics during the crisis. Firm characteristics are measured eight quarters prior to debt issuance. Table 7 contains the detailed description.

Firm characteristic	Dependent variable: Probability of bond versus loan issuance					
	(1) Size	(2) Tobin's Q	(3) Tangibility	(4) Rating	(5) Profitability	(6) Leverage
Size	0.332*** (0.047)	0.381*** (0.044)	0.380*** (0.044)	0.374*** (0.044)	0.380*** (0.044)	0.378*** (0.044)
Tobin's Q	0.209*** (0.065)	0.181*** (0.068)	0.191*** (0.065)	0.203*** (0.065)	0.193*** (0.065)	0.196*** (0.065)
Tangibility	-0.151 (0.218)	-0.176 (0.217)	-0.251 (0.232)	-0.138 (0.218)	-0.179 (0.218)	-0.172 (0.217)
Rating	0.014 (0.020)	0.017 (0.020)	0.018 (0.020)	0.000 (0.021)	0.017 (0.020)	0.017 (0.020)
Profitability	12.926*** (2.557)	13.332*** (2.566)	13.349*** (2.571)	13.272*** (2.538)	13.227*** (2.720)	13.203*** (2.553)
Leverage	0.721*** (0.266)	0.726*** (0.267)	0.740*** (0.266)	0.688*** (0.266)	0.732*** (0.266)	0.845*** (0.287)
Crisis	0.588*** (0.102)	0.689*** (0.096)	0.704*** (0.093)	0.647*** (0.098)	0.701*** (0.095)	0.665*** (0.098)
Crisis $\times$ Firm characteristic	0.283*** (0.073)	0.089 (0.128)	0.362 (0.359)	0.101*** (0.033)	0.796 (5.163)	-0.790 (0.626)
Observations	3,838	3,838	3,838	3,838	3,838	3,838
Pseudo R-squared	0.089	0.085	0.086	0.088	0.085	0.086

Table IA.6. **Broker-dealer leverage and firm characteristics.** This table presents logit regression results to explain the sensitivity of corporate financing choices to firm characteristics during an increase in BD leverage. Table 7 contains the detailed description.

Firm characteristic	Dependent variable: Probability of bond versus loan issuance					
	(1) Size	(2) Tobin's Q	(3) Tangibility	(4) Rating	(5) Profitability	(6) Leverage
Size	0.367*** (0.042)	0.365*** (0.042)	0.366*** (0.042)	0.363*** (0.042)	0.364*** (0.042)	0.367*** (0.041)
Tobin's Q	0.118 (0.076)	0.091 (0.078)	0.119 (0.076)	0.113 (0.076)	0.105 (0.076)	0.119 (0.076)
Tangibility	-0.235 (0.206)	-0.255 (0.207)	-0.236 (0.206)	-0.248 (0.206)	-0.294 (0.209)	-0.235 (0.206)
Rating	0.045** (0.019)	0.047** (0.019)	0.045** (0.019)	0.046** (0.019)	0.049** (0.019)	0.045** (0.019)
Profitability	11.750*** (2.500)	12.049*** (2.528)	11.717*** (2.509)	11.839*** (2.526)	11.665*** (2.466)	11.766*** (2.513)
Leverage	0.797*** (0.263)	0.820*** (0.262)	0.798*** (0.263)	0.799*** (0.262)	0.862*** (0.265)	0.795*** (0.262)
BD leverage	-0.009*** (0.001)	-0.009*** (0.001)	-0.009*** (0.001)	-0.009*** (0.001)	-0.009*** (0.001)	-0.009*** (0.001)
BD leverage $\times$ Firm char.	-0.001 (0.001)	0.003** (0.001)	0.000 (0.005)	0.001** (0.000)	0.182*** (0.048)	0.002 (0.006)
Observations	4,276	4,276	4,276	4,276	4,276	4,276
Pseudo R-squared	0.079	0.080	0.079	0.080	0.082	0.079

Table IA.7. **EBP and firm characteristics.** This table presents logit regression results to explain the sensitivity of corporate financing choices to firm characteristics during an increase in EBP. Table 7 contains the detailed description.

Firm characteristic	Dependent variable: Probability of bond versus loan issuance					
	(1) Size	(2) Tobin's Q	(3) Tangibility	(4) Rating	(5) Profitability	(6) Leverage
Size	0.350*** (0.043)	0.350*** (0.042)	0.354*** (0.042)	0.353*** (0.042)	0.353*** (0.042)	0.353*** (0.043)
Tobin's Q	0.082 (0.075)	0.076 (0.077)	0.087 (0.075)	0.089 (0.075)	0.095 (0.076)	0.086 (0.075)
Tangibility	-0.240 (0.212)	-0.239 (0.211)	-0.243 (0.212)	-0.232 (0.212)	-0.226 (0.212)	-0.240 (0.212)
Rating	0.039** (0.020)	0.039** (0.020)	0.039* (0.020)	0.037* (0.020)	0.038* (0.020)	0.039** (0.020)
Profitability	12.568*** (2.549)	12.718*** (2.551)	12.615*** (2.540)	12.441*** (2.551)	12.043*** (2.585)	12.617*** (2.545)
Leverage	0.793*** (0.258)	0.787*** (0.262)	0.795*** (0.259)	0.768*** (0.260)	0.774*** (0.262)	0.784*** (0.260)
EBP	0.566*** (0.047)	0.602*** (0.046)	0.592*** (0.046)	0.573*** (0.047)	0.594*** (0.046)	0.588*** (0.046)
EBP $\times$ Firm char.	0.089** (0.035)	0.182** (0.071)	-0.018 (0.181)	0.031** (0.014)	5.682** (2.406)	-0.376 (0.273)
Observations	4,153	4,153	4,153	4,153	4,153	4,153
Pseudo R-squared	0.096	0.096	0.095	0.096	0.096	0.095

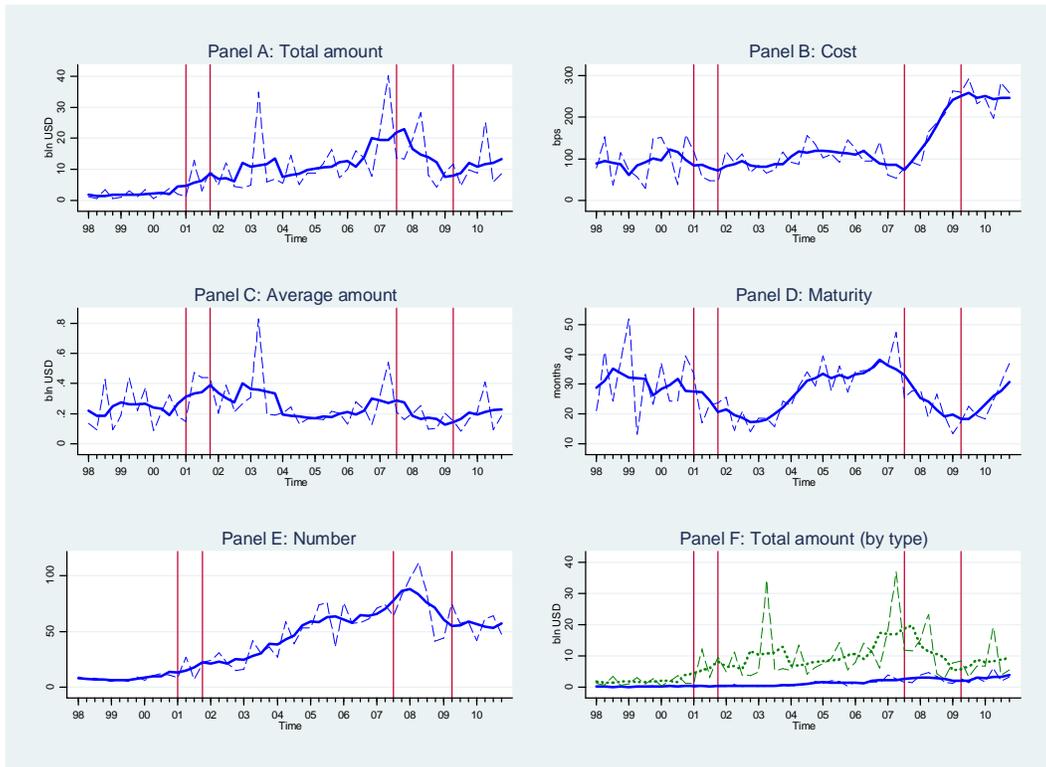


Figure IA.1. **New loan issuances (private firms)**. Panel A: total amount of loans issued (billion of January 1998 USD). Panel B: cost of loans issued (in bps). Panel C: average amount of loans issued. Panel D: maturity of loans issued (in months). Panel E: number of loans issued. Panel F: total amount of credit lines (dotted) and term loans (solid). All panels report the raw series (dashed line) and its smoothed version (solid line).

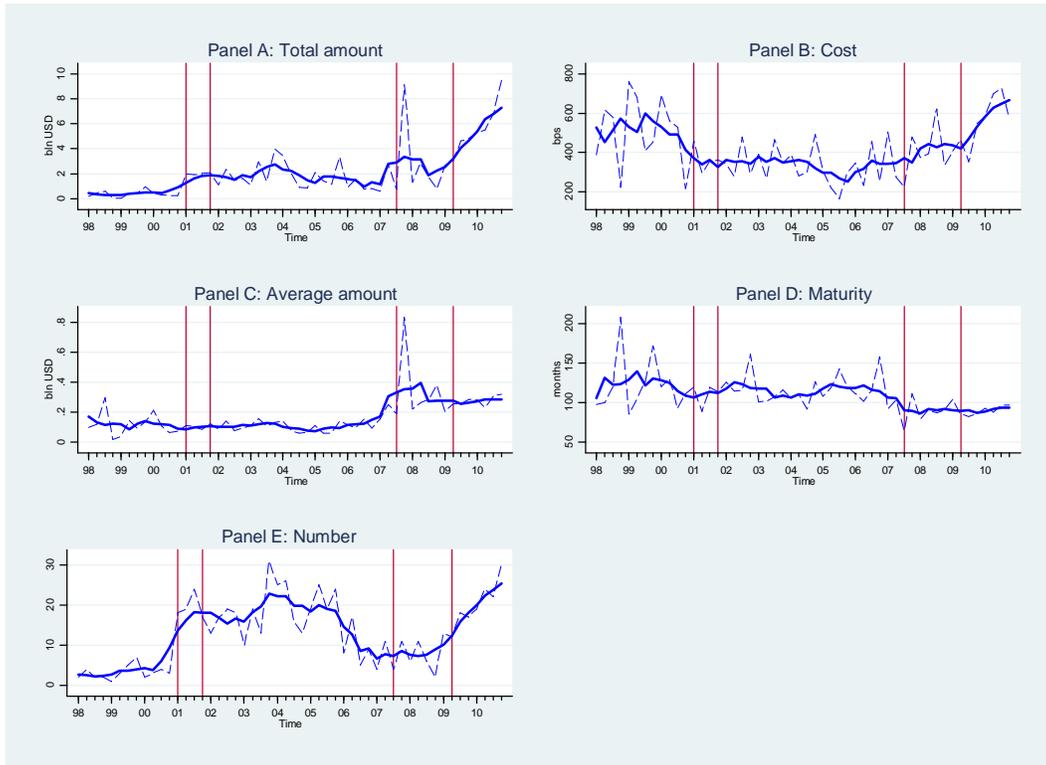


Figure IA.2. **New bond issuances (private firms)**. Panel A: total amount of bonds issued (billion of January 1998 USD). Panel B: cost of bonds issued (in bps). Panel C: average amount of bonds issued. Panel D: maturity of bonds issued (in months). Panel E: number of bonds issued. All panels report the raw series (dashed line) and its smoothed version (solid line).

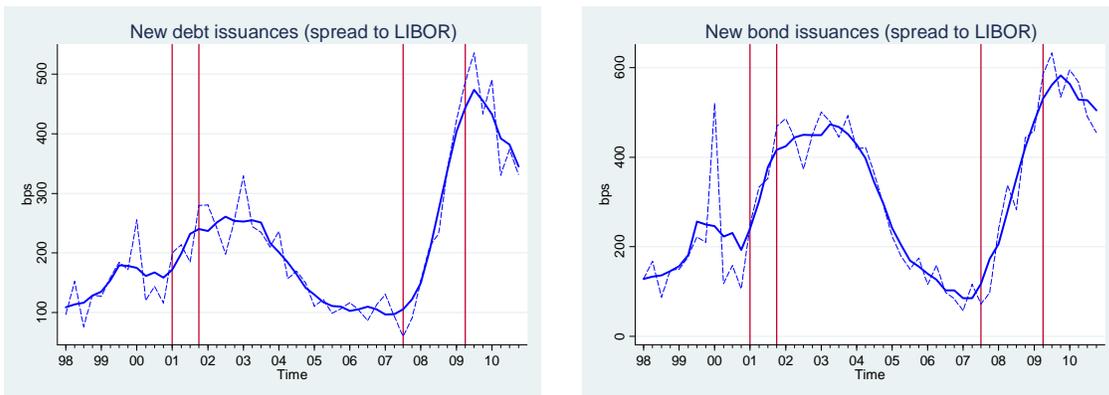


Figure IA.3. **Spread to LIBOR**. Cost of new debt (left panel) and bond (right panel) relative to LIBOR. For each bond issuance we subtract the 6 month LIBOR (in local currency) from the yield to maturity. We drop 51 bond issuances (out of 3,222 in total) with missing yield to maturity.

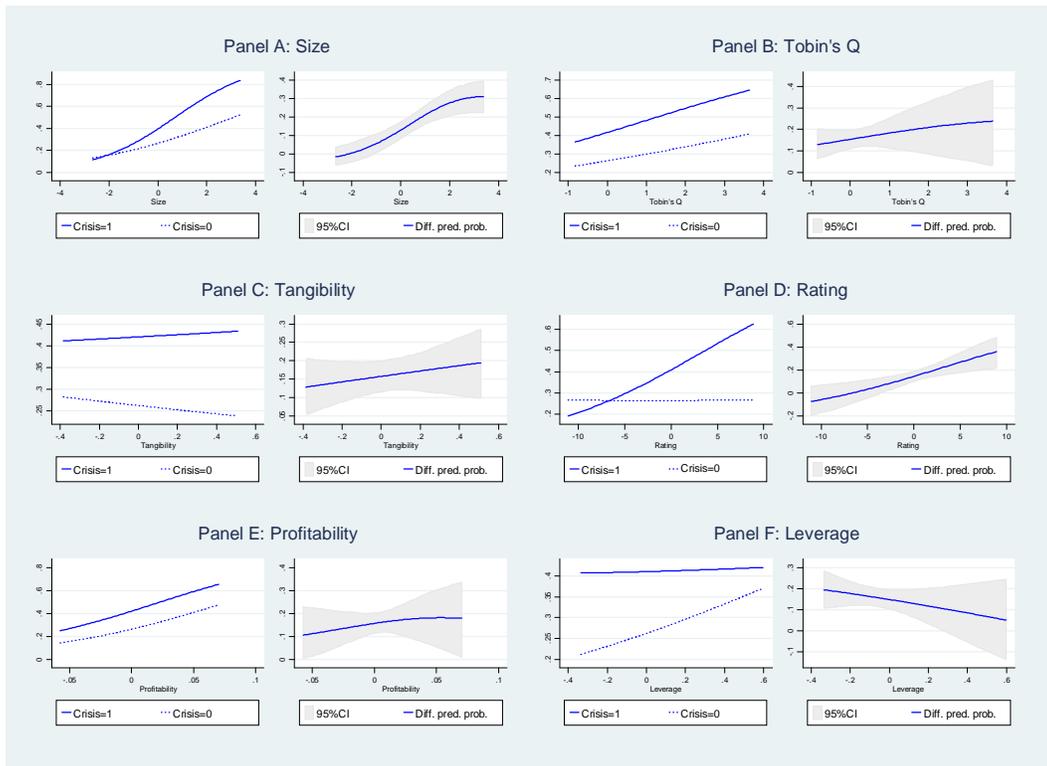


Figure IA.4. **Sensitivity during crisis.** Sensitivity of bond issuance probability to firm characteristics during and outside the crisis. Implied probabilities are based on the logit regression specifications of Table IA.5 where firm characteristics are measured eight quarters prior to debt issuance. Figure 11 contains the detailed description.

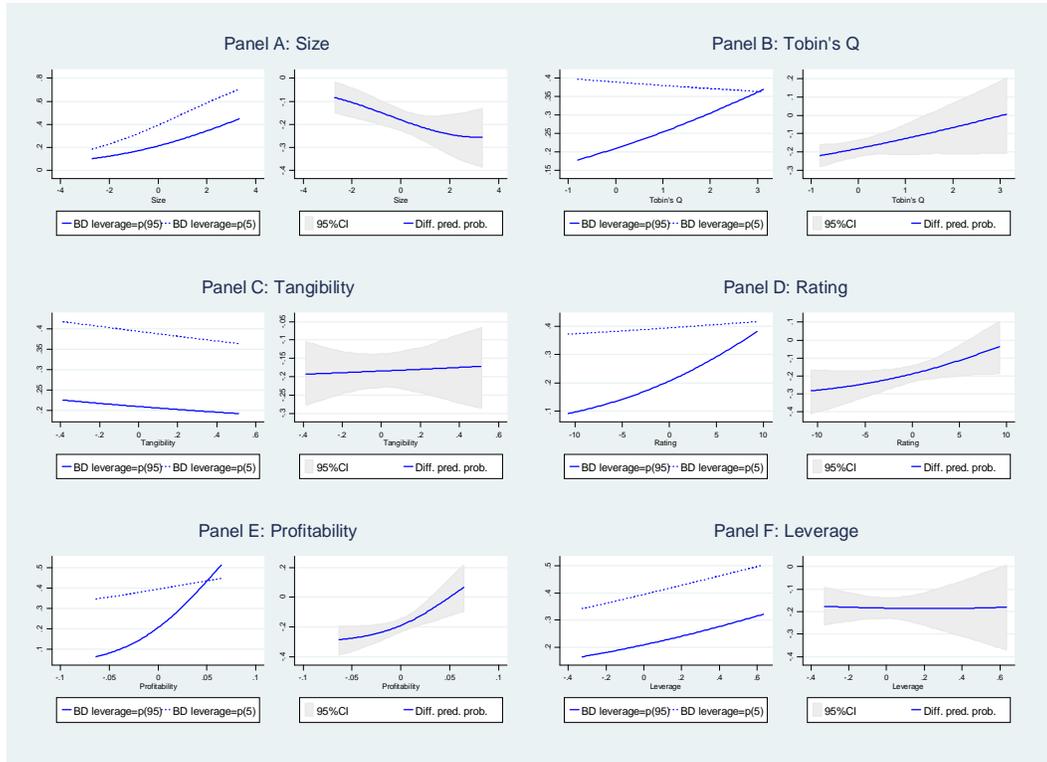


Figure IA.5. **Broker-dealer leverage and firm characteristics.** Sensitivity of bond issuance probability to firm characteristics during episodes of low and high BD leverage growth. Implied probabilities are based on the logit regression specifications of Table IA.6. For every specification, the left panel plots the probability of bond issuance during high (95% percentile value of *BD leverage*, solid line) and low broker-dealer leverage growth (5% percentile value of *BD leverage*, dotted line) over the entire range of values of the selected firm characteristic, keeping the other control variables at their mean levels. The right panel plots the difference in these predicted probabilities (solid line) together with its 95% confidence interval (shaded).

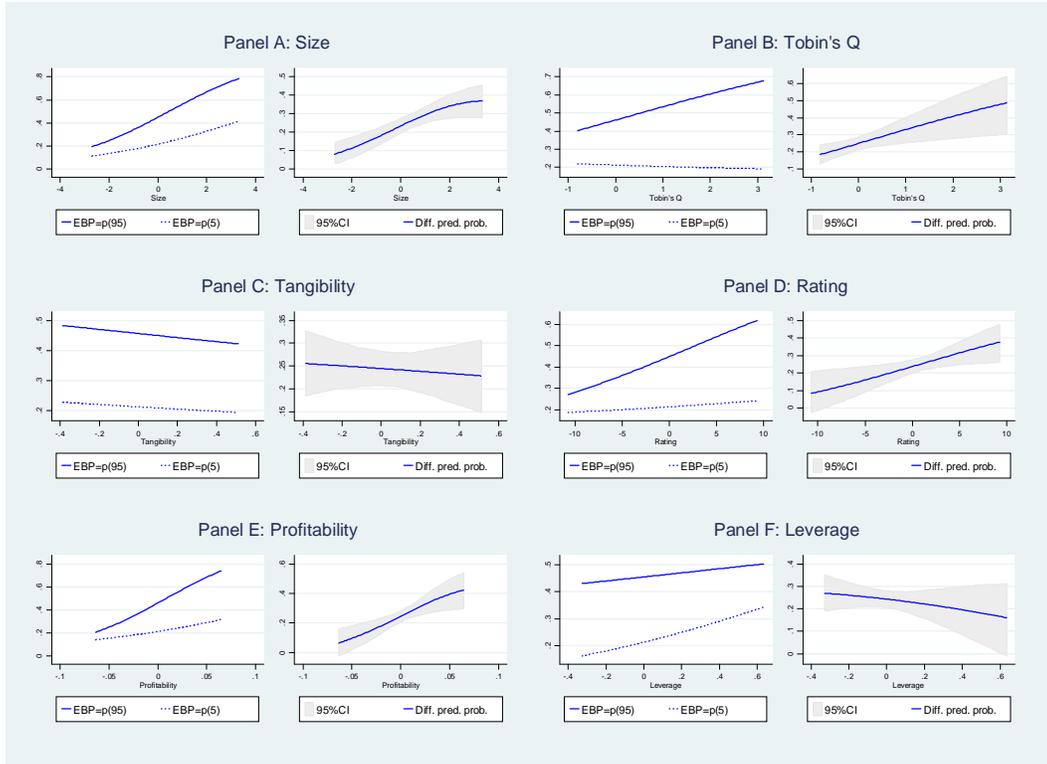


Figure IA.6. **EBP and firm characteristics.** Sensitivity of bond issuance probability to firm characteristics during episodes of low and high EBP. Implied probabilities are based on the logit regression specifications of Table IA.7. For every specification, the left panel plots the probability of bond issuance during high (95% percentile value of *EBP*, solid line) and low EBP (5% percentile value of *EBP*, dotted line) over the entire range of values of the selected firm characteristic, keeping the other control variables at their mean levels. The right panel plots the difference in these predicted probabilities (solid line) together with its 95% confidence interval (shaded).