Bank Liquidity Provision Across the Firm Size Distribution Online Appendix

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A. Additional Tables

Table A.1: *Comparing Y-9C and Y14 Aggregate Credit in $B*

Dataset	2019q4				2020q1				2020q2			
Description	Comm.	Util.	No. Banks	No. Obs	Comm.	Util.	No. Banks	No. Obs	Comm.	Util.	No. Banks	No. Obs
Y-9C All Banks:												
All Loans	4,608	2,254	350		4,627	2,565	349		4,833	2,573	345	
C&I	3,805	1,705	345		3,826	2,015	345		4,039	2,022	341	
Of which: $> 1m$	3,533	1,449	347		3,552	1,753	346		3,611	1,623	343	
Real estate-backed	631	377	340		633	381	340		626	382	337	
Of which: $> 1m$	496	242	341		501	249	341		494	250	338	
Other Leases	126	126	120		125	125	129		123	123	129	
Agricultural	46	46	247		44	44	245		46	46	244	
Y-9C Final Sample:												
All Loans	3,536	1,557	29		3,533	1,829	29		3,608	1,733	29	
C&I	3,124	1,274	29		3,125	1,549	29		3,207	1,457	29	
Of which: $> 1m$	2,959	1,109	29		2,959	1,383	29		2,961	1,211	29	
Real estate-backed	298	169	29		298	169	29		293	169	29	
Of which: $> 1m$	249	119	29		249	121	29		246	122	29	
Other Leases	101	101	26		99	99	26		96	96	26	
Agricultural	13	13	22		12	12	22		11	11	22	
Y-14Q Original Aggregate	4,613	1,997	32	270748	4,639	2,348	32	266749	4,624	2,073	32	267384
Y-14Q H1 Final Sample:												
All Loans	2,772	1,175	29	171034	2,796	1,428	29	169699	2,750	1,223	29	170892
C&I	2,585	1,006	29	126921	2,610	1,260	29	126015	2,561	1,052	29	125236
Real estate-backed	117	110	28	31846	118	111	28	31842	123	116	28	33997
Other Leases	56	51	25	10092	54	49	25	9784	52	47	25	9685
Agricultural	14	8	20	2175	14	7	20	2058	13	7	20	1974

Notes: This table reports the aggregate amount of committed and utilized bank credit in the FR-Y9C and the FR-Y14 H1 in the quarter reported in the header. The rows under the header "Y-9C All Banks" contain all loans listed in Y-9C schedule HC-C item 4.a (C&I loans to U.S. addresses), item 1.e(1) (loans secured by owner-occupied nonfarm nonresidential properties), item 10.b (other leases), or item 3 (loans to finance agricultural production). The rows labeled "Of which: $> 1m$" restrict to loans with commitments above $1 million using the Call Report small business lending schedule RC-C Part II. The rows under the header "Y-9C Final Sample" restrict to banks in our final Y-14 sample. The row labeled "Y-14Q Original Aggregate" contains all loans in the Y-14 Schedule H-1, including to borrowers in finance, insurance, and real estate (NAICS 52, 5312, or 551111) and from banks not in our final balanced sample that report consistently through 2020Q2. The rows under the header "Y-14Q Final Sample" contain our final sample of loans from a consistent panel of banks and corresponding to the four schedule HC-C items listed above.

Table A.2: ***Frequency of Borrower Financial Updates Controlling for Loan Characteristics.***

Dependent variable	Financials Indicator			Audit Indicator		
	(1)	(2)	(3)	(4)	(5)	(6)
<50m	0.41***			0.24***		
	(0.001)			(0.001)		
50-250m	0.49***	0.07***	0.07***	0.25***	0.02***	0.02***
	(0.003)	(0.002)	(0.002)	(0.002)	(0.002)	(0.002)
250m-1bn	0.49***	0.09***	0.09***	0.30***	0.07***	0.06***
	(0.004)	(0.003)	(0.003)	(0.003)	(0.003)	(0.003)
1-5bn	0.56***	0.12***	0.13***	0.39***	0.13***	0.13***
	(0.004)	(0.003)	(0.003)	(0.003)	(0.003)	(0.003)
>5bn	0.62***	0.13***	0.16***	0.44***	0.16***	0.15***
	(0.004)	(0.003)	(0.004)	(0.004)	(0.003)	(0.004)
Bank-Time FE	No	Yes	Yes	No	Yes	Yes
Industry-Time FE	No	No	Yes	No	No	Yes
Rating-Time FE	No	No	Yes	No	No	Yes
Loan Controls	No	No	Yes	No	No	Yes
No of Loans	142209	142090	141989	91252	91233	91208
N	1077566	1076699	1076107	633202	632968	632823
R^2	.023	.407	.411	.027	.367	.371

Notes: Regresses an indicator for updated reported financials in last two quarters (Col. 1-3) and reported audited financials in last two quarters (Col. 4-6) on various controls. Loan controls include maturity indicators, and collateral indicators. Sample is 2015Q1-2019Q4. Excludes bank-quarters that rarely report audit dates. Robust standard errors are clustered at the firm level in parentheses; *, **, and *** indicate significance at the 10%, 5%, and 1% level, respectively.

Table A.3: *Median Volatility Across the Firm Size Distribution*

Standard deviation:	Revenue growth		EBITDA/Assets		Net income/Assets		Stock return	
	Raw	Demeaned	Raw	Demeaned	Raw	Demeaned	Raw	Demeaned
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
Constant	0.28**	0.25**	0.16**	0.16**	0.19**	0.24**	0.17**	0.17**
	(0.01)	(0.01)	(0.01)	(0.01)	(0.02)	(0.03)	(0.01)	(0.01)
50-250	−0.05**	−0.05**	−0.06**	−0.06**	−0.08**	−0.13**	−0.03+	−0.03*
	(0.02)	(0.02)	(0.01)	(0.01)	(0.02)	(0.03)	(0.01)	(0.01)
250-1000	−0.10**	−0.11**	−0.09**	−0.09**	−0.12**	−0.16**	−0.05**	−0.05**
	(0.02)	(0.01)	(0.01)	(0.01)	(0.02)	(0.03)	(0.01)	(0.01)
1000-5000	−0.11**	−0.11**	−0.10**	−0.11**	−0.14**	−0.18**	−0.07**	−0.08**
	(0.01)	(0.01)	(0.01)	(0.01)	(0.02)	(0.03)	(0.01)	(0.01)
5000+	−0.13**	−0.12**	−0.11**	−0.12**	−0.15**	−0.19**	−0.09**	−0.09**
	(0.01)	(0.01)	(0.01)	(0.01)	(0.02)	(0.03)	(0.01)	(0.01)
Observations	2,077	2,039	2,027	1,989	2,077	2,039	1,125	1,125

Notes: Each column reports the coefficients from a quantile regression on a constant and indicators for four size bins, in millions of dollars. Thus, the coefficient in the first row gives the median standard deviation of the variable indicated in the column header for firms with less than $50 million in assets, and the subsequent rows give the difference in the median standard deviation between firms with less than $50 million in assets and firms in the size category indicated in the first column. The sample in columns (1)-(6) is a balanced panel of Compustat firms over fiscal years 1995-2015, excluding firms in finance (NAICS 52, 5312, or 551111) or with non-positive revenue or assets in any year. All Compustat variables are deflated using the GDP price index. The sample in columns (7)-(8) is the subset of these firms with non-missing stock return information in all months between 1995 and 2015, using the WRDS CRSP-Compustat link. The dependent variable in columns (1), (3), (5), and (7) is the raw standard deviation over the 1995-2015 period. The dependent variable in columns (2), (4) and (6) is the standard deviation after first demeaning the variable with respect to industry (NAICS 4)-year. The dependent variable in column (8) is the standard deviation of the excess return over the CRSP value-weighted index. Robust standard errors in parentheses.

Table A.4: ***Distribution of Collateral Use by Industry and Facility Type, December 31, 2019***

Collateral Type	Real Estate	Cash	AR & Inventory	Fixed Assets	Other	Blanket Lien	Unsecured	Obs.
Assets (mil.)								
				Panel A: Revolving Credit Lines				
11: Agriculture, Forestry, Fishing, Hunting	.016	.015	.47	.062	.081	.28	.079	1436
21: Mining, Quarrying, Oil, Gas.	.017	.037	.35	.051	.26	.11	.18	2196
22: Utilities	.00098	.032	.035	.016	.095	.088	.73	2047
23: Construction	.013	.027	.33	.053	.062	.38	.13	3789
31-33: Manufacturing	.01	.02	.36	.037	.066	.27	.24	14953
42: Wholesale Trade	.011	.013	.5	.021	.04	.33	.093	9634
44-45: Retail Trade	.028	.0082	.67	.012	.028	.15	.11	7092
48-49: Transportation and Warehousing	.017	.019	.26	.11	.082	.26	.25	2466
51: Information	.0049	.038	.23	.016	.12	.32	.27	2060
53: Real Estate and Rental and Leasing	.045	.06	.17	.097	.081	.11	.44	2173
54: Professional, Scientific, and Technical Services	.004	.023	.36	.01	.06	.41	.14	4968
55: Management of Companies and Enterprises	.014	.13	.23	.014	.037	.3	.3	296
56: Administrative ...	.0088	.029	.35	.028	.087	.4	.11	1931
61: Educational Services	.098	.037	.22	.018	.18	.34	.12	164
62: Health Care and Social Assistance	.055	.03	.32	.022	.087	.4	.1	1546
71: Arts, Entertainment, and Recreation	.042	.053	.2	.12	.16	.31	.11	813
72: Accommodation and Food Services	.051	.042	.17	.044	.2	.32	.18	1083
81: Other Services	.063	.06	.27	.026	.078	.32	.18	464
				Panel B: Term Loans				
11: Agriculture, Forestry, Fishing, Hunting	.2	.027	.13	.42	.088	.097	.033	331
21: Mining, Quarrying, Oil, Gas.	.085	.0073	.22	.34	.075	.18	.087	412
22: Utilities	.035	.082	.078	.26	.078	.2	.27	548
23: Construction	.24	.01	.1	.41	.026	.18	.045	1904
31-33: Manufacturing	.23	.013	.13	.23	.044	.24	.12	8449
42: Wholesale Trade	.38	.0073	.12	.16	.033	.25	.055	3849
44-45: Retail Trade	.48	.0046	.24	.044	.013	.18	.044	5713
48-49: Transportation and Warehousing	.13	.0018	.054	.64	.039	.087	.047	3267
51: Information	.11	.024	.14	.14	.1	.36	.13	1157
53: Real Estate and Rental and Leasing	.57	.0067	.023	.15	.03	.16	.067	5711
54: Professional, Scientific, and Technical Services	.23	.011	.16	.12	.051	.36	.081	2083
55: Management of Companies and Enterprises	.55	.0096	.046	.099	.0096	.22	.065	415
56: Administrative ...	.23	.0078	.15	.21	.04	.31	.061	895
61: Educational Services	.61	.017	.042	.047	.038	.22	.025	236
62: Health Care and Social Assistance	.38	.011	.11	.11	.051	.29	.058	2322
71: Arts, Entertainment, and Recreation	.38	.029	.071	.21	.059	.21	.036	984
72: Accommodation and Food Services	.2	.015	.071	.057	.066	.57	.029	2552
81: Other Services	.64	.013	.034	.055	.021	.2	.05	776

Notes: The table reports the fraction of loan commitments to each industry with the type of collateral indicated in the table header. The sample includes all loans in the Y-14 corporate loan schedule as of 2019Q4. We exclude from this table any industry with fewer than 40 loans in our sample as of December 31, 2019.

Table A.5: ***Collateral Usage in Credit Lines by Firms Size and Industry.***

Dependent variable	AR+Inventory		Real Estate		Fixed Assets		Cash		Other		Blanket Lien		Unsecured	
							Credit Lines							
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)	(14)
50-250 (in mil)	-0.105***	-0.049***	0.005*	0.004	0.029***	0.024***	0.011***	0.008***	0.026***	0.014***	-0.053***	-0.082***	0.089***	0.083***
	(0.007)	(0.007)	(0.002)	(0.002)	(0.003)	(0.003)	(0.002)	(0.002)	(0.003)	(0.003)	(0.006)	(0.006)	(0.004)	(0.004)
250-1000 (in mil)	-0.198***	-0.107***	-0.004*	-0.007***	0.026***	0.017***	0.028***	0.022***	0.039***	0.016***	-0.089***	-0.134***	0.201***	0.195***
	(0.009)	(0.009)	(0.002)	(0.002)	(0.004)	(0.004)	(0.003)	(0.003)	(0.004)	(0.004)	(0.007)	(0.007)	(0.008)	(0.008)
1000-5000 (in mil)	-0.259***	-0.156***	-0.012***	-0.014***	0.007*	-0.001	0.029***	0.022***	0.054***	0.026***	-0.144***	-0.191***	0.325***	0.315***
	(0.009)	(0.009)	(0.001)	(0.002)	(0.003)	(0.003)	(0.003)	(0.003)	(0.004)	(0.004)	(0.007)	(0.008)	(0.012)	(0.012)
>5000 (in mil)	-0.451***	-0.330***	-0.015***	-0.017***	-0.015***	-0.024***	0.006**	-0.000	0.025***	-0.001	-0.239***	-0.281***	0.686***	0.652***
	(0.008)	(0.011)	(0.001)	(0.001)	(0.002)	(0.003)	(0.002)	(0.002)	(0.004)	(0.005)	(0.006)	(0.008)	(0.014)	(0.016)
Industry FE	No	Yes	No	Yes	No	Yes	No	Yes	No	Yes	No	Yes	No	Yes
No of Firms	40602	40602	40602	40602	40602	40602	40602	40602	40602	40602	40602	40602	40602	40602
N	60559	60559	60559	60559	60559	60559	60559	60559	60559	60559	60559	60559	60559	60559
R^2	0.097	0.208	0.003	0.009	0.006	0.023	0.007	0.016	0.007	0.032	0.036	0.100	0.331	0.351
							Term Loans							
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)	(14)
50-250 (in mil)	0.015*	0.016*	-0.204***	-0.188***	0.191***	0.140***	0.006**	0.007***	0.014***	0.017***	-0.026**	0.002	0.000	0.002
	(0.006)	(0.006)	(0.009)	(0.008)	(0.011)	(0.009)	(0.002)	(0.002)	(0.003)	(0.003)	(0.008)	(0.007)	(0.002)	(0.003)
250-1000 (in mil)	0.002	0.012	-0.308***	-0.290***	0.253***	0.187***	0.015***	0.016***	0.023***	0.024***	-0.022	0.012	0.035***	0.037***
	(0.008)	(0.008)	(0.011)	(0.012)	(0.021)	(0.018)	(0.003)	(0.003)	(0.005)	(0.005)	(0.013)	(0.011)	(0.006)	(0.006)
1000-5000 (in mil)	0.026*	0.024*	-0.373***	-0.341***	0.054**	0.022	0.026***	0.026***	0.052***	0.050***	0.006	0.017	0.204***	0.199***
	(0.011)	(0.012)	(0.010)	(0.010)	(0.018)	(0.016)	(0.005)	(0.005)	(0.007)	(0.007)	(0.018)	(0.018)	(0.019)	(0.019)
>5000 (in mil)	-0.036***	-0.040***	-0.421***	-0.375***	0.056**	0.031	0.013***	0.011**	0.046***	0.041***	-0.086***	-0.087***	0.424***	0.416***
	(0.009)	(0.011)	(0.006)	(0.009)	(0.017)	(0.018)	(0.004)	(0.004)	(0.007)	(0.008)	(0.017)	(0.018)	(0.028)	(0.029)
Industry FE	No	Yes	No	Yes	No	Yes	No	Yes	No	Yes	No	Yes	No	Yes
No of Firms	20690	20690	20690	20690	20690	20690	20690	20690	20690	20690	20690	20690	20690	20690
N	31591	31591	31591	31591	31591	31591	31591	31591	31591	31591	31591	31591	31591	31591
R^2	0.002	0.047	0.115	0.188	0.056	0.209	0.006	0.011	0.008	0.017	0.003	0.084	0.203	0.212

Notes: Results from estimating a model of the following type:

$$\text{collateral class}_\ell = \sum_{j \neq \{\$0\text{-}50\}} \beta_j \mathbb{I}\{\text{size class} = j\} + \text{Industry FE} + \epsilon_\ell$$

where post-2020Q1 is a dummy that is one after 2020Q1. Data for 2019Q4. Robust standard errors are clustered at the bank level in parentheses; *, **, and *** indicate significance at the 10%, 5%, and 1% level, respectively.

Table A.6: ***Distribution of Cash / Assets by Firm as of December 31, 2019***

Firm Size	Cash / Assets						
(Assets in Millions)	10^{st} Percentile	25^{th} Percentile	Mean	Median	75^{th} Percentile	90^{th} Percentile	Firms in Category
<50	0.3	2.1	12.9	7.6	17.4	32.4	19,274
50-250	0.1	1.1	9.0	4.5	12.5	23.4	5,360
250-1000	0.2	1.2	8.8	3.5	10.5	23.0	2,385
1000-5000	0.3	0.9	6.7	3.1	8.1	16.4	1,774
5000-	0.2	0.9	6.2	3.0	7.5	15.4	1,329

Notes: The table reports the distribution of individual borrowers' cash and equivalents divided by total assets with financial reporting available as of December 31, 2019. For firms matched to Compustat, cash and equivalents and total assets are sourced from Compustat financials.

Table A.7: ***Pricing of Revolving Credit Lines and Market Concentration.***

Dependent variable	Interest Rate (in bp)					
Sample	All Revol. Cl.	HHI>p50	HHI<p50	HHI>p50	HHI<p50	New Relationship
	None	Above	Below	Above	Below	NewRel
50-250 (in mil)	-36.2***	-52.3***	-29.5***	-41.6***	-35.9***	-15.9***
	(1.702)	(2.877)	(1.987)	(4.511)	(1.832)	(5.804)
250-1000 (in mil)	-37.1***	-57.0***	-32.7***	-51.3***	-35.3***	3.3
	(2.947)	(5.104)	(3.281)	(6.502)	(3.236)	(9.336)
1000-5000 (in mil)	-61.2***	-79.5***	-57.7***	-56.8***	-62.2***	-27.1*
	(2.791)	(6.929)	(2.968)	(6.463)	(3.049)	(15.057)
>5000 (in mil)	-84.0***	-111.1***	-78.4***	-101.0***	-82.2***	-15.6
	(4.604)	(16.089)	(4.774)	(10.185)	(5.148)	(15.461)
HHI Data Source	None	Y-14	Y-14	SOD	SOD	None
Avg. Sample HHI	.175	.365	.113	.41	.148	.153
Median County HHI	.181	.181	.181	.275	.275	.181
Reference-Rate-Time FE	Yes	Yes	Yes	Yes	Yes	Yes
Industry-Time FE	Yes	Yes	Yes	Yes	Yes	Yes
Bank-Time FE	Yes	Yes	Yes	Yes	Yes	Yes
Rating-Time FE	Yes	Yes	Yes	Yes	Yes	Yes
Firm Financial Controls	Yes	Yes	Yes	Yes	Yes	Yes
Loan Term Controls	No	No	No	No	No	No
No. Firms	34410	8840	26869	4779	29643	4131
No. Obs	105443	25562	79333	13305	88146	4569
R^2	.555	.663	.544	.674	.548	.692

Notes: Results from estimating a model of the following type: $\text{Interest}_{\ell,t} = \sum_{s \neq \{\$0-50m\}} \beta_{1,s} \mathbb{I}\{\text{size class} = s\} + \Gamma' X_t + \epsilon_{\ell,t}$ where $\text{Interest}_{\ell,i,b,t}$ is the interest on facility ℓ from bank b to firm i at time t. The sample contains originations and renewals between 2015Q1 and 2019Q4. Industry×time fixed effects are at the NAICS 3-digit level. Rating×time fixed effects are categorical variables for 10 internal loan rating categories. Firm financial controls are debt/assets, cash and receivables/assets, net income/assets, and operating income/interest expense. Robust standard errors are clustered at the firm level in parentheses; *, **, and *** indicate significance at the 10%, 5%, and 1% level, respectively.

Table A.8: ***Total Debt Increase between December 31, 2019 and March 31, 2020***

	2019q4			2020q1		
Firm Size	Debt	Bk. Loan	No. Obs	Debt	Bk. Loan	No. Obs
<50	30.91	26.47	3062	31.04	26.07	3062
50-250	43.14	29.50	867	44.28	28.07	867
250-1000	127.18	45.63	577	129.48	49.42	577
1000-5000	655.08	123.72	665	685.42	146.19	665
5000-	2,590.25	156.26	526	2,665.65	232.25	526

Notes: This table represents the change in total debt for a balanced panel of firms that for which financial information is available as of Dec. 31, 2019 and March 31, 2020. Financial information is sourced from Compustat, where available, and the FR Y-14Q Schedule H1 otherwise. Total debt represents the sum of long-term and short-term debt. Bank loans represent the global commitment of banking credit.

Table A.9: *Drawdowns by Firm Size: Details on Maturity, Collateral, and Interest Rate Controls*

Dependent Variable	Drawdown Rate (in ppt)	
	(1)	(2)
Demand Loans × COVID	-4.3***	-2.3***
	(0.5)	(0.6)
1-6 month × COVID	0.0	0.0
	(.)	(.)
6-12 month × COVID	0.8**	0.5*
	(0.4)	(0.3)
1-2 years × COVID	2.2**	1.0*
	(0.8)	(0.5)
2-4 years × COVID	6.0***	2.4***
	(1.3)	(0.7)
More than 4 years × COVID	7.4***	3.3***
	(1.3)	(0.7)
Real Estate × COVID	-1.2	-0.1
	(1.4)	(1.2)
Cash × COVID	-0.8	-0.8
	(0.6)	(0.5)
AR+Inventory × COVID	-2.1***	-2.1***
	(0.4)	(0.3)
Fixed Assets × COVID	-0.6	-0.6
	(0.6)	(0.5)
Blanket Lien × COVID		
Other × COVID	-0.2	0.1
	(0.7)	(0.5)
Unsecured × COVID	0.0	0.0
	(.)	(.)
Spread × COVID		0.3**
		(0.1)
20-40 Drawdown 2019Q4 × COVID		-1.0
		(2.2)
40-60 Drawdown 2019Q4 × COVID		-5.3
		(4.2)
60-80 Drawdown 2019Q4 × COVID		-15.7**
		(6.9)
80-100 Drawdown 2019Q4 × COVID		-7.9***
		(0.7)
Loan FE	Yes	Yes
Time FE	No	No
Bank-Time FE	Yes	Yes
State-Time FE	Yes	Yes
Industry-Time FE	Yes	Yes
Financials	Yes	Yes
Rating-Time FE	Yes	Yes
Maturity Controls	Yes	Yes
Collateral Controls	Yes	Yes
Interest Rate Controls	No	Yes
Drawdown in 2019q4	No	Yes
No of Firms	60195	43654
N	756540	549043
R^2	.83	.86

Notes: Results from estimating a model of the following type: $\text{Drawdown}_{\ell,t} = \alpha_\ell + \delta_t + \sum_{s \neq \{\$0-50m\}} \beta_{s,1} [\mathbb{I}\{\text{size class} = s\}] \times \text{COVID} + \Gamma' \times X_\ell \times \text{COVID} + \epsilon_{\ell,t}$ where $\text{Drawdown}_{\ell,t}$ is the ratio of utilized over committed credit and COVID is an indicator for 2020Q1 and 2020Q2. We restrict the sample to outstanding loans from 2017Q4 onwards. Industry×time fixed effects are at the NAICS 3 digit level. Rating×time fixed effects are categorical variables for 10 internal loan rating categories. Firm financial controls are lagged debt/assets, cash and receivables/assets, net income/assets, and operating income/interest expense, each interacted with COVID. Maturity and collateral controls are six maturity categories (demand loans, 0-6 months, 6-12 months, 1-2 years, 2-4 years, more than 4 years) and six collateral classes (real restate, marketable securities, accounts receivables and inventory, fixed assets, other, and unsecured or blanket lien), each interacted with COVID. Robust standard errors are clustered at the three digit NAICS level in parentheses; *, **, and *** indicate significance at the 10%, 5%, and 1% level, respectively.

Table A.10: ***Drawdown of Revolving Credit Lines by Firm Size, 2020Q1 and 2020Q2***

	Utilization/Commitment						
Assets (mil.)	$< 10\%$	$10-$ 30%	$30-$ 50%	$50-$ 70%	$70-$ 90%	$> 90\%$	Obs.
Panel A: 2020Q1							
0-50	.3	.087	.12	.15	.14	.19	36391
50-250	.29	.095	.12	.16	.15	.18	10803
250-1000	.27	.1	.14	.17	.16	.16	8132
1000-5000	.28	.16	.15	.14	.12	.15	9473
>5000	.53	.12	.094	.078	.044	.14	8688
Panel B: 2020Q2							
0-50	.41	.11	.16	.12	.071	.13	35073
50-250	.37	.12	.15	.14	.092	.14	10796
250-1000	.34	.12	.15	.13	.1	.15	8220
1000-5000	.4	.15	.13	.11	.068	.14	9563
>5000	.67	.084	.057	.041	.024	.12	9021

Notes: The table reports the distribution of drawn credit as a share of total commitments. The distribution is reported for 2020Q1 and 2020Q2. Observations report the number of loans in each size category in 2020Q1 and 2020Q2, respectively.

Table A.11: ***Drawdowns by Firm Size and Exposure to COVID-19 shock: Abnormal 3-digit Industry Decline in Sales.***

Dependent variable	Drawdown Rate (in ppt)					
	(1)	(2)	(3)	(4)	(5)	(6)
Exposure × COVID	11.0**	6.3*	5.0*	5.1**	4.6**	-2.5
	(4.0)	(3.5)	(2.4)	(2.2)	(1.5)	(2.2)
Exposure × 50-250 (in mil) × COVID		5.4***	4.9***	5.1***	4.9***	1.7
		(1.2)	(1.2)	(1.1)	(1.3)	(1.4)
Exposure × 250-1000 × COVID		2.8	3.5**	3.5**	3.6**	2.2
		(2.1)	(1.4)	(1.3)	(1.3)	(1.4)
Exposure × 1000-5000 × COVID		6.8	7.9**	7.8**	7.9**	3.3
		(4.0)	(3.2)	(3.1)	(3.0)	(2.4)
Exposure × 5000- × COVID		8.5	9.9	9.3	9.9	6.6
		(7.7)	(6.8)	(6.5)	(6.1)	(3.9)
50-250 (in mil) × COVID		3.4**	2.3**	2.2**	2.1**	0.4
		(1.5)	(0.8)	(0.8)	(0.8)	(0.6)
250-1000 × COVID		6.5**	5.2**	4.7**	4.5**	0.8
		(2.6)	(1.8)	(1.8)	(1.8)	(0.6)
1000-5000 × COVID		17.8***	16.0***	15.7***	15.0***	6.3***
		(3.9)	(3.1)	(3.0)	(2.8)	(1.4)
5000- × COVID		28.9***	25.1***	25.7***	25.2***	11.4***
		(6.7)	(6.5)	(6.4)	(6.2)	(3.6)
Loan FE	Yes	Yes	Yes	Yes	Yes	Yes
Time FE	Yes	Yes	No	No	No	No
Bank-Time FE	No	No	Yes	Yes	Yes	Yes
State-Time FE	No	No	No	Yes	Yes	Yes
Financials	No	No	No	No	Yes	Yes
Rating-Time FE	No	No	No	No	Yes	Yes
Loan Terms	No	No	No	No	No	Yes
No of Firms	14591	14591	14591	14591	12464	8608
N	184903	184903	184892	184891	155882	115915
R^2	0.81	0.81	0.81	0.82	0.83	0.83

Notes: Results from estimating a model of the following type:

$$\text{Drawdown}_{\ell,i,t} = \alpha_\ell + \delta_t + \sum_{s \neq \{\$0-50m\}} \beta_{1,s} \left[\mathbb{I}\{\text{size class} = s\} \times \text{COVID}\right] + \beta_2 \left[\text{Exposure}_i \times \text{COVID}\right]$$
$$+ \sum_{s \neq \{\$0-50m\}} \beta_{3,s} \left[\text{Exposure} \times \mathbb{I}\{\text{size class} = s\} \times \text{COVID}\right] + \epsilon_{\ell,i,t}.$$

where $\text{Drawdown}_{\ell,t}$ is the ratio of utilized over committed credit, COVID is an indicator variable for 2020Q1 and 2020Q2 and Exposure_i is the 3-digit NAICS code industry-level growth in sales between 2019Q2 and 2020Q2 less the average Q2-to-Q2 growth in the industry between 2015 and 2019. Financial controls include leverage (total debt / assets), interest coverage (operating income / interest expense), return on assets (net income / assets), access to cash (cash and receivables / assets), and whether the borrower is active in the bond market. Loan term controls include maturity, collateral type, interest rate spread and drawdown levels in 2019q4. For loan term controls, we consider 6 maturity class categories (demand loans, 0-6 months, 6-12 months, 1-2 years, 2-4 years, more than 4 years), 6 types of collateral classes (real restate, marketable securities, accounts receivables and inventory, fixed assets, other, and unsecured or blanket lien), 5 categories of drawdown prior to COVID (<20%, 20-40%, 40-60%, 60-80%, and >80%), and interest rate spreads; we allow effects of these controls to vary pre- and post-COVID shock. We restrict the sample to outstanding loans from 2017Q4 onwards. Sales data only avaiable for retail sales and restaurants. Robust standard errors are clustered at the 3-digit NAICS industry level in parentheses; *, **, and *** indicate significance at the 10%, 5%, and 1% level, respectively.

Table A.12: ***Drawdowns by Firm Size Category - Controlling for Bank Balance Sheet Constraints***

Dependent Variable Drawdown Rate (in ppt)				
BANK Variable	N/A	CET1 > p50	Liq. > p50	Fund. > p50
	(1)	(2)	(3)	(4)
BANK × COVID		2.3*	1.8	-0.9
		(1.1)	(1.2)	(1.0)
BANK × 50-250 (in mil) × COVID		-1.1	-5.2***	2.3
		(1.4)	(1.3)	(1.9)
BANK × 250-1000 × COVID		4.1*	-4.2**	1.8
		(2.0)	(2.0)	(2.3)
BANK × 1000-5000 × COVID		3.0	-0.5	0.1
		(1.8)	(1.6)	(1.6)
BANK × 5000- × COVID		1.2	-1.1	0.5
		(1.7)	(1.4)	(1.3)
50-250 (in mil) × COVID	3.9**	4.3***	6.6***	2.4**
	(1.6)	(1.4)	(1.2)	(1.0)
250-1000 × COVID	10.2***	9.5***	12.4***	8.9***
	(1.9)	(1.6)	(1.7)	(1.7)
1000-5000 × COVID	12.7***	11.6***	12.3***	12.1***
	(1.6)	(1.4)	(1.5)	(1.6)
5000- × COVID	13.9***	13.7***	14.7***	13.9***
	(1.6)	(1.6)	(1.7)	(1.4)
Median BANK Value	N/A	11.798	29.178	43.286
Bank FE	Yes	Yes	Yes	Yes
Time FE	Yes	Yes	Yes	Yes
Firm Financials Controls	No	Yes	Yes	Yes
Rating-Time FE	No	Yes	Yes	Yes
Loan FE	Yes	Yes	Yes	Yes
Loan Term Controls	No	No	No	No
Interest Rate Spread	No	No	No	No
No. Firms	55129	47202	47202	47202
No. Obs	727616	562326	562326	562326
R^2	.819	.826	.826	.826

Notes: Results from estimating a model of the following type:

$$\text{Drawdown}_{\ell,i,t} = \alpha_\ell + \delta_t + \gamma_i + \sum_{s \neq \{\$0-50m\}} \beta_{1,s} \left[\mathbb{I}\{\text{size class} = s\} \times \text{COVID}\right] + \beta_2 \left[\text{BANK}_i \times \text{COVID}\right] + \sum_{s \neq \{\$0-50m\}} \beta_{3,s} \left[\text{BANK} \times \mathbb{I}\{\text{size class} = s\} \times \text{COVID}\right] + \epsilon_{\ell,i,t}.$$

where $\text{Drawdown}_{\ell,i,t}$ is the ratio of utilized over committed credit on loan ℓ at time t by bank i, COVID is an indicator variable for observations in and after 2020Q1 and BANK_i represents the relevant bank balance sheet constraint from the prior quarter. Bank balance sheet constraints include discrete variables indicating whether a bank has above median CET1 ratio (CET1 / RWA), Liquid Assets, or Core Deposits in a given quarter t compared to other banks in the sample, in columns (2), (3), and (4), respectively. Median BANK Value indicates the average median value for the relevant bank balance sheet constraint. For the purposes of this analysis, we excluded all loans held at banks that are U.S. subsidiaries of foreign banks. Robust standard errors are clustered at the bank-level in parentheses; *, **, and *** indicate significance at the 10%, 5%, and 1% level, respectively.

Table A.13: ***PPP Participation and COVID Exposure and Loan Terms.***

Sample	<250	0-50	50-250	<250	0-50	50-250
Dependent variable	PPP Participation					
	(1)	(2)	(3)	(4)	(5)	(6)
Exposure	0.030***	0.028***	0.028***	0.018***	0.017***	0.018**
	(0.004)	(0.005)	(0.007)	(0.004)	(0.005)	(0.007)
log(Assets)	-0.055***	0.041***	-0.232***	-0.036***	0.042***	-0.196***
	(0.002)	(0.003)	(0.010)	(0.002)	(0.003)	(0.010)
Drawdown 2020Q1				0.014*	-0.008	0.115***
				(0.006)	(0.007)	(0.013)
Demand Loans				0.064***	0.061***	0.082***
				(0.008)	(0.008)	(0.021)
6-12 month				-0.050***	-0.047***	0.011
				(0.008)	(0.009)	(0.024)
1-2 years				-0.014	-0.009	-0.029
				(0.008)	(0.009)	(0.023)
2-4 years				-0.062***	-0.043***	-0.074***
				(0.009)	(0.011)	(0.021)
More than 4 years				-0.196***	-0.146***	-0.141***
				(0.011)	(0.015)	(0.021)
Real Estate				-0.060***	-0.105***	-0.013
				(0.017)	(0.020)	(0.033)
Cash				-0.162***	-0.204***	-0.034
				(0.019)	(0.024)	(0.031)
AR+Inventory				0.081***	0.055***	0.107***
				(0.005)	(0.006)	(0.011)
Fixed Assets				0.111***	0.057***	0.181***
				(0.013)	(0.016)	(0.021)
Other				-0.008	-0.021	0.023
				(0.011)	(0.012)	(0.020)
No of Firms	36656	29350	7370	36399	29098	7365
N	43060	33393	9667	42796	33135	9661
R^2	0.020	0.007	0.049	0.061	0.033	0.109

Notes: This tables shows results from estimating a model of the following type:

$$\text{PPP Participation}_{i,t} = \alpha_\ell + \delta_t + \beta_t \times \text{Exposure}_i + \epsilon_{\ell,i,t}$$

Robust standard errors are clustered at the three digits NAICS industry level in parentheses; *, **, and *** indicate significance at the 10%, 5%, and 1% level, respectively.

Table A.14: *Loan Terms By Existence of Audited Financials as of December 31, 2019*

Category	% Demand	% 0-1 Yr. Maturity	% Unsecured	N
Panel A: All Firms				
Has Audited Financials	0.10	0.11	0.30	32613
Missing Audited Financials	0.23	0.28	0.12	36205
Panel B: Small Firms Only				
Has Audited Financials	0.10	0.21	0.10	13701
Missing Audited Financials	0.20	0.32	0.05	25036
Panel C: Large Firms Only				
Has Audited Financials	0.09	0.03	0.55	13086
Missing Audited Financials	0.15	0.05	0.45	1922

This table displays the distribution of key maturity and collateral loan terms for loans based on whether or not the borrower reported audited financial statements. Panel A shows the distribution for all firms. Panel B shows the distribution for small firms only (firms with < $250 million in assets). Panel C shows the distribution for large firms only (firms with > $1 billion in assets).

Table A.15: *Loan Terms By Rating at Origination or Renewal, for Loans on Bank Balance Sheets as of December 31, 2019*

Category	% Demand	% 0-1 Yr. Maturity	% Unsecured	N
Panel A: All Firms				
Investment Grade	0.19	0.18	0.38	19431
BB	0.18	0.24	0.09	27424
B	0.19	0.26	0.05	9578
D-CCC & Missing	0.16	0.31	0.09	1432
Panel B: Small Firms Only				
Investment Grade	0.34	0.26	0.08	8671
BB	0.23	0.30	0.04	18206
B	0.26	0.34	0.02	6300
D-CCC & Missing	0.19	0.41	0.04	840
Panel C: Large Firms Only				
Investment Grade	0.02	0.07	0.76	7024
BB	0.02	0.02	0.25	3856
B	0.02	0.02	0.12	1452
D-CCC & Missing	0.02	0.06	0.16	264

This table displays the distribution of key maturity and collateral loan terms for loans based on the borrower's rating at origination. Ratings at origination are determined based on a concordance mapping between a bank's internal risk rating system and external (e.g. S&P) standardized ratings. Borrowers for which we do not observe the loan (and rating) at origination are excluded from this analysis. Panel A shows the distribution for all firms. Panel B shows the distribution for small firms only (firms with < $250 million in assets). Panel C shows the distribution for large firms only (firms with > $1 billion in assets).

Table A.16: *Loan Terms By Tercile of Volatility of Revenue Growth, for Loans on Bank Balance Sheets as of December 31, 2019*

Category	% Demand	% 0-1 Yr. Maturity	% Unsecured	N
Panel A: All Firms				
Lower Vol. Tercile	0.09	0.04	0.61	5752
Mid Vol. Tercile	0.08	0.04	0.54	5417
Upper Vol. Tercile	0.08	0.04	0.44	4703
Panel B: Small Firms Only				
Lower Vol. Tercile	0.16	0.18	0.17	155
Mid Vol. Tercile	0.15	0.13	0.12	217
Upper Vol. Tercile	0.19	0.17	0.15	231
Panel C: Large Firms Only				
Lower Vol. Tercile	0.09	0.04	0.66	4999
Mid Vol. Tercile	0.08	0.04	0.61	4455
Upper Vol. Tercile	0.07	0.03	0.51	3732

This table displays the distribution of key maturity and collateral loan terms for loans based on their tercile of volatility in revenue growth. Volatility of revenue growth is calculated based on financials as reported in Compustat for a balanced panel of firms between 2015 and 2019. Terciles are assigned at the firm level. Firm-level terciles are then merged into the FR Y-14 loan-level data to match volatility measures to these key loan term measures. Unmatched firms and firms that did not report revenue growth are excluded from this analysis. Panel A shows the distribution for all firms. Panel B shows the distribution for small firms only (firms with < $250 million in assets). Panel C shows the distribution for large firms only (firms with > $1 billion in assets).

Table A.17: *Loan Terms By Tercile of Volatility of EBITDA / Assets, for Loans on Bank Balance Sheets as of December 31, 2019*

Category	% Demand	% 0-1 Yr. Maturity	% Unsecured	N
Panel A: All Firms				
Lower Vol. Tercile	0.08	0.04	0.62	5670
Mid Vol. Tercile	0.09	0.04	0.50	5514
Upper Vol. Tercile	0.09	0.04	0.44	4325
Panel B: Small Firms Only				
Lower Vol. Tercile	0.22	0.18	0.11	148
Mid Vol. Tercile	0.16	0.14	0.13	172
Upper Vol. Tercile	0.15	0.16	0.16	281
Panel C: Large Firms Only				
Lower Vol. Tercile	0.08	0.04	0.67	5043
Mid Vol. Tercile	0.08	0.03	0.54	4617
Upper Vol. Tercile	0.08	0.04	0.53	3196

This table displays the distribution of key maturity and collateral loan terms for loans based on their tercile of volatility in EBITDA / Assets. Volatility of EBITDA / Assets is calculated based on financials as reported in Compustat for a balanced panel of firms between 2015 and 2019. Terciles are assigned at the firm level. Firm-level terciles are then merged into the FR Y-14 loan-level data to match volatility measures to these key loan term measures. Unmatched firms and firms that did not report revenue growth are excluded from this analysis. Panel A shows the distribution for all firms. Panel B shows the distribution for small firms only (firms with < $250 million in assets). Panel C shows the distribution for large firms only (firms with > $1 billion in assets).

Table A.18: *Loan Terms By Tercile of Volatility of Net Income / Assets, for Loans on Bank Balance Sheets as of December 31, 2019*

Category	% Demand	% 0-1 Yr. Maturity	% Unsecured	N
Panel A: All Firms				
Lower Vol. Tercile	0.08	0.04	0.61	5831
Mid Vol. Tercile	0.09	0.05	0.54	5614
Upper Vol. Tercile	0.08	0.04	0.43	4427
Panel B: Small Firms Only				
Lower Vol. Tercile	0.25	0.17	0.13	126
Mid Vol. Tercile	0.16	0.14	0.19	197
Upper Vol. Tercile	0.14	0.17	0.11	280
Panel C: Large Firms Only				
Lower Vol. Tercile	0.08	0.03	0.65	5183
Mid Vol. Tercile	0.08	0.05	0.60	4624
Upper Vol. Tercile	0.08	0.03	0.51	3379

This table displays the distribution of key maturity and collateral loan terms for loans based on their tercile of volatility in net income / assets. Volatility of net income / assets is calculated based on financials as reported in Compustat for a balanced panel of firms between 2015 and 2019. Terciles are assigned at the firm level. Firm-level terciles are then merged into the FR Y-14 loan-level data to match volatility measures to these key loan term measures. Unmatched firms and firms that did not report revenue growth are excluded from this analysis. Panel A shows the distribution for all firms. Panel B shows the distribution for small firms only (firms with < $250 million in assets). Panel C shows the distribution for large firms only (firms with > $1 billion in assets).

Table A.19: *Loan Terms By Tercile of Volatility of Return on Equity, for Loans on Bank Balance Sheets as of December 31, 2019*

Category	% Demand	% 0-1 Yr. Maturity	% Unsecured	N
Panel A: All Firms				
Lower Vol. Tercile	0.08	0.06	0.78	5306
Mid Vol. Tercile	0.09	0.04	0.53	5044
Upper Vol. Tercile	0.08	0.02	0.26	3608
Panel B: Small Firms Only				
Lower Vol. Tercile	0.19	0.21	0.20	100
Mid Vol. Tercile	0.21	0.13	0.16	127
Upper Vol. Tercile	0.13	0.11	0.10	206
Panel C: Large Firms Only				
Lower Vol. Tercile	0.07	0.05	0.81	4957
Mid Vol. Tercile	0.09	0.04	0.57	4254
Upper Vol. Tercile	0.07	0.01	0.31	2606

This table displays the distribution of key maturity and collateral loan terms for loans based on their tercile of volatility in return on equity. Volatility of revenue growth is calculated based on financials as reported in Compustat for a balanced panel of firms between 2015 and 2019. Terciles are assigned at the firm level. Firm-level terciles are then merged into the FR Y-14 loan-level data to match volatility measures to these key loan term measures. Unmatched firms and firms that did not report revenue growth are excluded from this analysis. Panel A shows the distribution for all firms. Panel B shows the distribution for small firms only (firms with < $250 million in assets). Panel C shows the distribution for large firms only (firms with > $1 billion in assets).

Table A.20: *Loan Count By Firm Size Distribution, as of December 31, 2019*

Size	10^{th} %	25^{th} %	Median	Mean	75^{th} %	90^{th} %
Missing	1	1	1	1.14	1	1
<50	1	1	1	1.31	1	2
50-250	1	1	1	2.12	2	4
250-1000	1	1	2	3.09	3	7
1000-5000	1	1	2	4.76	6	12
5000-	1	1	2	6.6	8	17

This table displays the distribution of the number of loans reported by firm across the firm size distribution as of December 31, 2019.

Table A.21: *Bank Count By Firm Size Distribution, as of December 31, 2019*

Size	10^{th} %	25^{th} %	Median	Mean	75^{th} %	90^{th} %
Missing	1	1	1	1.02	1	1
<50	1	1	1	1.02	1	1
50-250	1	1	1	1.22	1	2
250-1000	1	1	1	1.83	2	4
1000-5000	1	1	1.5	2.82	4	7
5000-	1	1	1	3.42	5	10

This table displays the distribution of the number of banks a firms takes loans from (any type) across the firm size distribution as of December 31, 2019.

B. Additional Figures

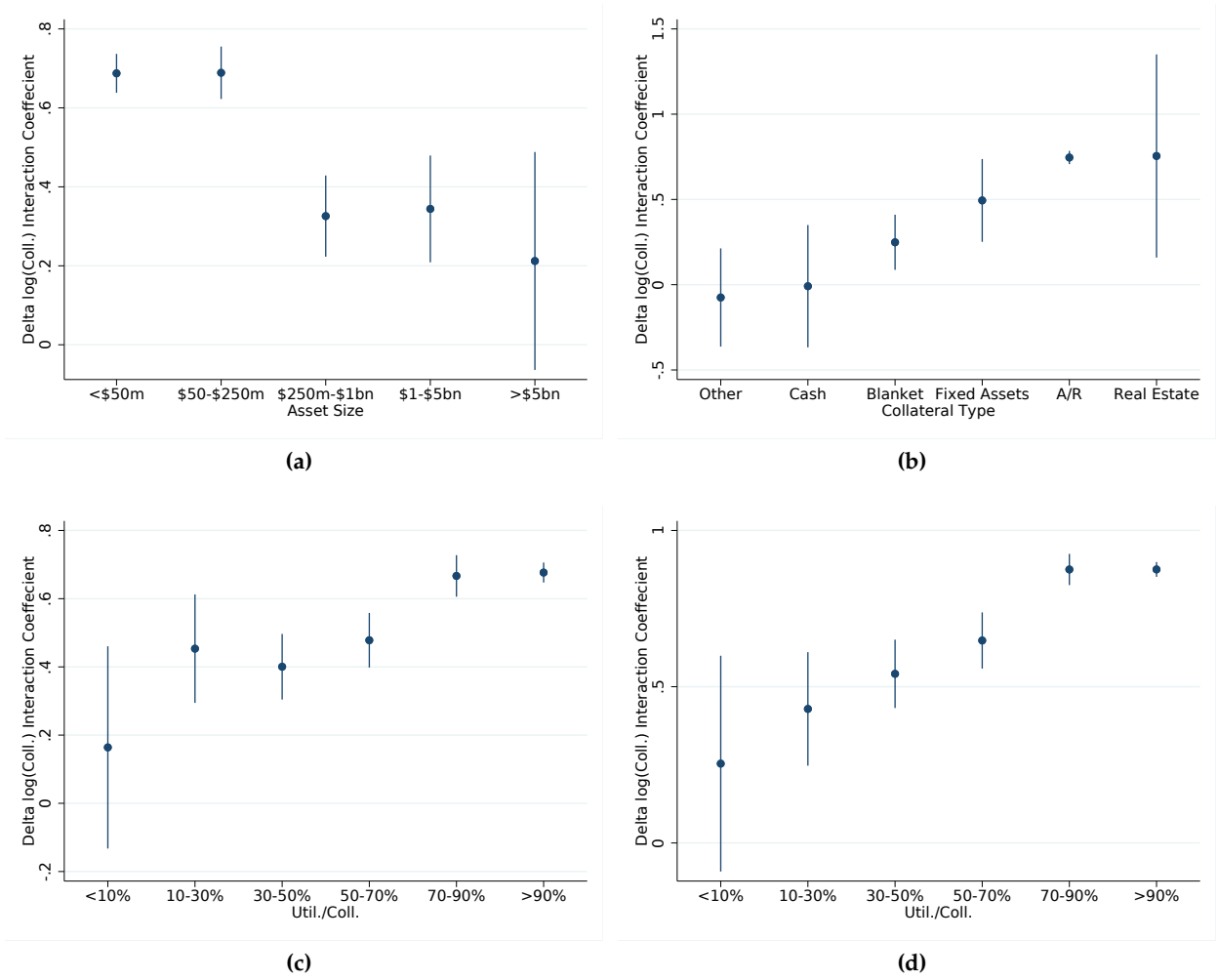
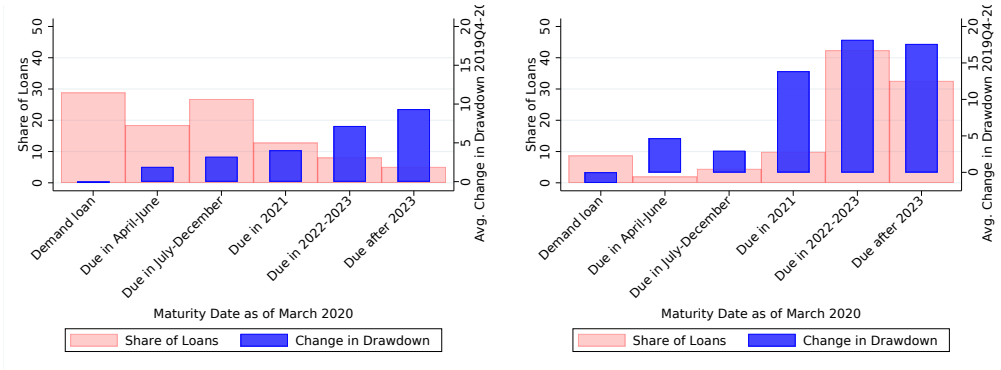


Figure A.1: *The figures above plot coefficients estimated using a loan-level panel regression of the change in the log of utilization on the change in log collateral values in the presence of various controls:* $\Delta \ln Utilization_{\ell,t} = \sum_s \beta_s \left[\mathbb{I}\{size\ class = s\} \times \Delta \ln Collateral\ value_{\ell,t}\right] + \Gamma' X_{\ell,t} + \epsilon_{\ell,t}$. *Indicator interactions are used to recover elasticities for sub-samples of loans. Controls include bank-time, industry-time, and rating-time fixed effects, as well as uninteracted indicator variables and the change in the log of commitment size. The sample period is 2015Q1 to 2020Q1. Figures plot the elasticity of utilization to collateral, β, for each sub-sample interaction and the 95% confidence interval. Panel (a) interacts plots elasticities by firm size bin, Panel (b) by collateral type, and Panels (c) and (d) with the percent of utilization relative to collateral value. Panel (d) restricts the sample to loans collateralized by accounts receivable. Standard errors are clustered by firm.*



(a) *Assets <$250M* **(b)** *Assets >$1 B*

Figure A.2: ***Change in Drawdown by Remaining Maturity.*** *This figure plots the change in average drawdown (blue, right y-axis) between December 31, 2019 and March 31, 2020 by remaining maturity of the respective facility as of in March 1, 2020 broadly categorized into demand loans, April-June, etc. We split the sample into small (less than $250 mil. in assets, left panel) and large firms (more than $1 bil. in assets, right panel). Further, we plot the share of facilities for each maturity category within the class of firms considered.*

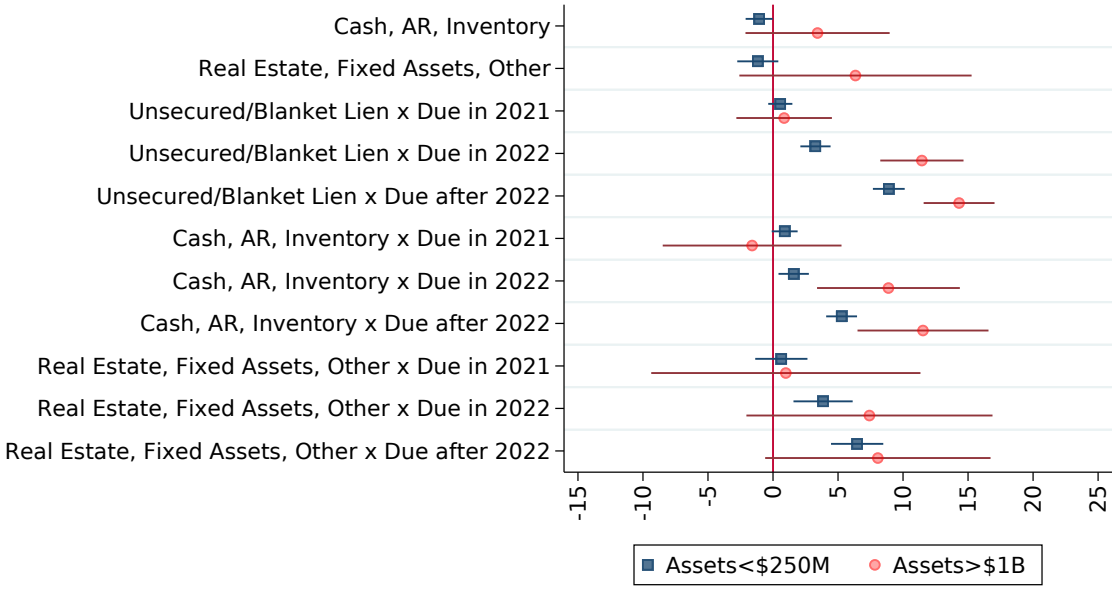
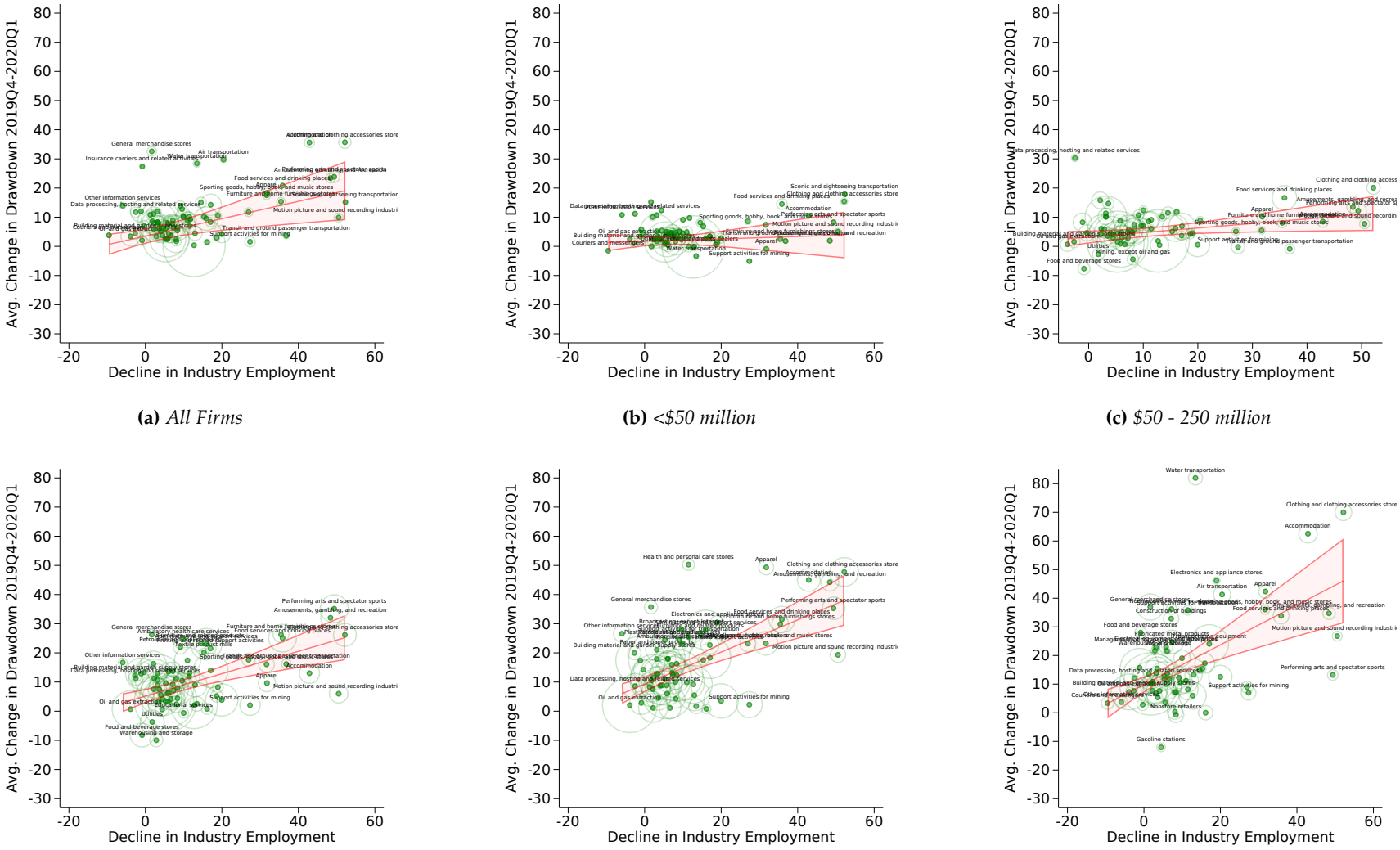


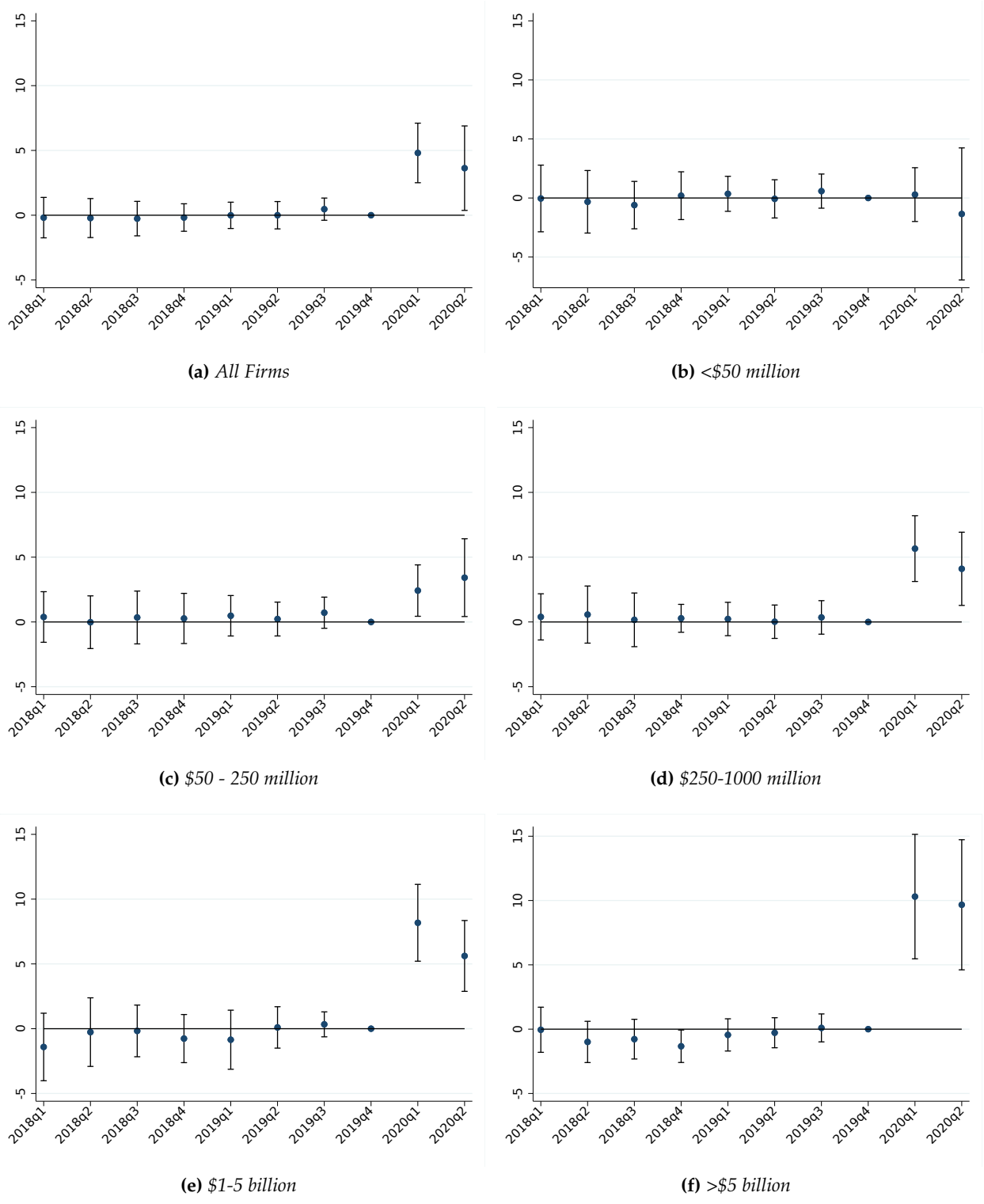
Figure A.3: ***Maturity, Collateral, and Drawdowns in Q1***. *This figure plots the change in average drawdown between December 31, 2019 and March 31, 2020 by collateral type and maturity, as compared to an unsecured/blanket lien loan due in 2020. Regression coefficients are based on estimating a model of the form:* $Drawdown_{\ell,t} = \sum_c \beta_c \mathbb{I}\{collateral = c\} + \sum_c \sum_m \beta_{c,m} \mathbb{I}\{collateral = c, maturity = m\} + \Gamma' \times X_\ell + \epsilon_{\ell,t}$, *where* $Drawdown_{\ell,t}$ *represents the loan-level drawdown in 2020q1. Controls include bank fixed effects, rating fixed effects, industry fixed effects, firm financials, bond market access, interest rate spreads, and the borrower's drawdown rate as of December 31, 2019. We split the sample into small (less than $250 million in assets) and large (greater than $1 billion in assets) firms, and estimate the regression equation separately for each sub-sample.*



(a) *All Firms* **(b)** *<$50 million* **(c)** *$50 - 250 million*

(d) *$250-1000 million* **(e)** *$1-5 billion* **(f)** *>$5 billion*

Figure A.4: ***Industry COVID Exposure and Credit Line Drawdowns by Firm Size.*** *3-digit NAICS code industry-level. Average change in credit line drawdown from 2019Q4 through 2020Q1. Employment growth between 2019Q2 and 2020Q2 less the Q2-to-Q2 average between 2015 and 2019. Linear fit with industries weighted by number of firms per industry. Data restricted to industries with at least 10 firms per firm size category. Perimeter of hollow circles indicate relative industry size by number of firms reporting in the Y14 within the respective size class.*



(a) *All Firms*

(b) *<$50 million*

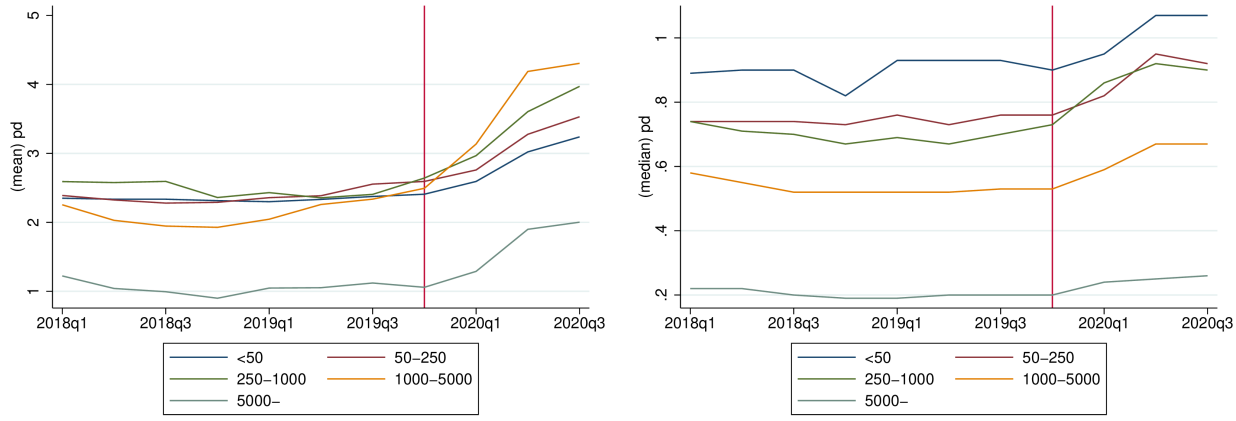
(c) *$50 - 250 million*

(d) *$250-1000 million*

(e) *$1-5 billion*

(f) *>$5 billion*

Figure A.5: ***Industry COVID Exposure and Credit Line Drawdowns by Firm Size.*** *The figure plots the sequence of coefficients* $\{\beta_t\}$ *obtained from estimating* $Drawdown_{\ell,t} = \alpha_\ell + \delta_t + \beta_t \times Exposure_i + \epsilon_{\ell,i,t}$*, where* $Drawdown_{\ell,t}$ *is the ratio of utilized to committed credit and* $Exposure_i$ *is the 3-digit NAICS code industry-level employment growth between 2019Q2 and 2020Q2 less the Q2-to-Q2 average between 2015 and 2019. 95% confidence bands.*



(a) *Mean* **(b)** *Median*

Figure A.6: *The figures display the mean and median Probability of Default (PD) values by firm size category over time. Mean and median PD values are based on bank model estimates for borrower PDs, for banks that are required to follow advanced internal ratings based (IRB) approaches, or the corresponding PD based on the borrower's Obligor Risk Rating, for other banks. PD values were adjusted to ensure reporting on a scale of 0-100%. A PD of 100% represent a defaulted borrower. The vertical bar represents 2019q4 (pre-COVID).*

C. Proofs and Model Extensions

C.1. Proofs

In order to get close form solutions, assume that ϵ can take three values $\{-e, 0, e\}$ with probability $\{q, 1-2q, q\}$ respectively. The equilibrium contract with discretion is characterized by four regions defined by how large the cash-flow shock ρ is. Two of these are "dominance" regions in the sense that monitoring is not worth it:

- Region 1 (very small shock): $\rho < \theta(z-e)$. In that case, ρ is so small that lender wants to continue even in the worst case scenario ($\theta(z-e) - \rho > 0$). There is thus no value in learning.
- Region 4 (very large shock): $\rho > \theta(z+e)$. In that case, ρ is so large that lender wants to reject even in the best case scenario ($\theta(z+e) - \rho < 0$). Again, there is no value in learning.

This shows monitoring can only occur for intermediate values of $\rho \in [\underline{\rho}, \overline{\rho}]$. Intuitively, this range is larger if (i) monitoring costs are low, (ii) there is significant uncertainty e over terminal values ("option value of learning"). In fact, we will see that in the three-values case, the magnitude of e relative to monitoring costs ξ characterizes the equilibrium cutoffs $[\underline{\rho}, \overline{\rho}]$. To determine these cutoffs, we consider the two other regions in which monitoring is not clearly dominated.

- Region 2 (moderately small shock): $\theta(z-e) < \rho < \theta z$. In that case, lender wants to continue in all states except the worst case scenario $\epsilon = -e$. That occurs with probability q.

For a cash-flow shock of that size, the lender's optimal choice is derived as follows. If they do not monitor, their expected payoff is $\theta z - \rho$ which is positive in this region. Without monitoring, the lender thus accepts to grant funds and their expected payoff is $V^N = \theta z - \rho$. If they monitor, they will accept in all cases expect if $\epsilon = -e$. The expected payoff of monitoring is thus:

$$V^M = \underbrace{\theta z - \rho}_{V^N} + \underbrace{q[\rho - (\theta(z-e)]}_{\text{Option value}} - \underbrace{\xi}_{\text{Monitoring cost}}$$

Comparing the two implies that the lender monitors only if the shock is large enough. Intuitively, the option value of learning grows with the size of the shock ρ: low shocks are not alarming

enough to justify incurring monitoring costs. Formally, that determines the lower cutoff $\underline{\rho}$:

$$V^M > V^N \iff \rho > \underline{\rho} := \theta(z-e) + \xi/q$$

A necessary condition for this monitoring solution is that $e - \xi/\theta q > 0$ (otherwise $\underline{\rho}$ is outside of Region 2). Intuitively, there must be enough uncertainty relative to monitoring costs. If this condition is violated, the lender never monitors and always accepts in this region (rubber stamping).

The analysis of the last region follows very closely the one of Region 2:

- Region 3 (moderately large shock): $\theta z < \rho < \theta(z+e)$. In that case, lender wants to continue only in the best case scenario $\epsilon = e$. That occurs with probability q.

If they do not monitor, their expected payoff is $\theta z - \rho$ which is negative in this region. Without monitoring, the lender thus reject and their expected payoff is $V^N = 0$. If they monitor, they will accept only if $\epsilon = e$. The expected payoff of monitoring is thus:

$$V^M = \underbrace{0}_{V^N} + \underbrace{q[\theta(z+e) - \rho]}_{\text{Option value}} - \underbrace{\xi}_{\text{Monitoring cost}}$$

Comparing the two implies that the lender monitors only if the shock is low enough. Intuitively, the option value of learning decreases with the size of the shock ρ: high shocks are too alarming to justify incurring monitoring costs. Formally, that determines the higher cutoff $\overline{\rho}$:

$$V^M > V^N \iff \rho < \overline{\rho} := \theta(z+e) - \xi/q$$

The condition for this monitoring solution is the same as in Region 2: $e - \xi/\theta q > 0$ (otherwise $\overline{\rho}$ is outside of Region 3). There must be enough uncertainty relative to monitoring costs. If this condition is violated, the lender never monitors and always rejects in this region (blind rejections).

Moreover, the optimal choice of committed credit lines versus giving lender discretion varies in the cross-section of firms. Note first that for some borrowers giving the lender discretion increases credit limit (on paper). To see this compare the credit limit with commitment $\hat{\rho} = \mu + \sigma h^{-1}(\frac{\mu - \theta z}{\sigma})$ and the maximum draw-down that can occur with discretion $\overline{\rho} = \theta z + (\theta e - \xi/q)$:

$$\hat{\rho} < \overline{\rho} \iff \theta e - \xi/q > \mu - \theta z + \sigma h^{-1}(\frac{\mu - \theta z}{\sigma})$$

This condition holds if uncertainty e over terminal values is sufficiently high. For these borrowers, the option value of discretion is particularly high: there is a lot to potentially learn through monitoring.

Of course, a higher credit limit on paper will not necessarily be honored when the lender has discretion. Borrower's and total surplus are determined by the probability of continuation at $t = 1$ across all realizations of (ρ, ϵ). Without discretion this probability is $F(\hat{\rho})$. With discretion, this probability is:

$$\begin{aligned} P(\textit{continuation}) = & \quad F(\underline{\rho}) + (1-q)\left[F(\theta z) - F(\underline{\rho})\right] + q\left[F(\overline{\rho}) - F(\theta z)\right] \\ = & \quad q\left[\Phi\left(\frac{\overline{\rho}-\mu}{\sigma}\right) + \Phi\left(\frac{\underline{\rho}-\mu}{\sigma}\right)\right] + (1-2q)\Phi\left(\frac{\theta z - \mu}{\sigma}\right). \end{aligned} \tag{A.1}$$

This probability increases with uncertainty e as long as $\mu > \theta z$. In other words, the value of discretion comes from a combination of (i) uncertainty over asset values (ii) large liquidity risk relative to pleageable assets.

C.2. Policy Intervention

Ex-post subsidy: We first consider the effect of direct lending subsidy through the lens of the model. Suppose that the lender receives a transfer $s > 0$ for each loan made at $t = 1$ (equivalently, it is transferred to the borrower and is fully pleageable). It is actually straightforward to solve for the effect of this subsidy on the monitoring equilibrium at $t = 1$. Indeed, a subsidy is isomorphic to increasing expected terminal values to $\theta z + s$. The equilibrium structure is preserved: the lender monitors in a region $[\underline{\rho}(s), \overline{\rho}(s)]$ with:

$$\underline{\rho}(s) := s + \theta(z - e) + \xi/q$$

$$\overline{\rho}(s) := s + \theta(z + e) - \xi/q$$

The subsidy shifts all cutoffs to the right by s. The implications for credit are as follows: (i) there is more lending in the new equilibrium but still a lot of monitoring and rejections; (ii) the cost of raising the amount of guaranteed credit by \$1 is exactly \$1 ($\underline{\rho}(s)$ increases one-for-one with s); (iii) committed credit lines are not renegotiated upwards unless the subsidy is large enough ($s > \hat{\rho} - \theta z$).

Ex-ante subsidy: If the subsidy is put in place at $t = 0$, it now not only influence the monitoring game, but also the size of committed credit lines and the choice of borrower between the two. We have seen above how $s > 0$ changes the properties of contracts with discretion. Here we thus examine the effect of committed credit lines and then on borrower choice.

The subsidy naturally boosts committed credit lines. The borrower and lender know that they will receive s unless the firm is terminated at $t = 1$. The equilibrium condition that determines credit limit is thus amended to $\int_{-\infty}^{\hat{\rho}(s)} \theta z + s - \rho dF(\rho) = 0$, which implies that: $\hat{\rho}(s) = \mu + \sigma h^{-1}(\frac{\mu - \theta z - s}{\sigma})$. Since h^{-1} is decreasing, we can see that $\hat{\rho}(s)$ increases with the subsidy level s. Moreover, just as in the case above, one can see that a subsidy s is isomorphic to a larger level of expected terminal values $\theta z + s$.

How does the subsidy impact borrower's choice of commitment versus discretion? The subsidy tilts the trade-off toward committed credit lines, and hence can help to alleviate the effect of a large liquidity shock. To see this, recall that in laissez-faire one condition for discretion to be preferred is that terminal values are low relative to expected liquidity shock. Since the subsidy is equivalent to an increase in terminal values, it makes committed credit lines relatively more attractive.

Guarantees: In practice, loan guarantees are a common form of intervention to support lending markets. Through the lens of the model, we model a guarantee as a pair (g, f) capturing a guarantee level and a guarantee fee. Taking up the guarantee implies that the lender's payoff at $t = 2$ is at least g, at an upfront cost f. Guaranteeing the downside shares some similarity with giving a subsidy. The lender's expected payoff at $t = 2$ given the guarantee level is given by $\mathbb{E}[\max\{\theta(z + \epsilon), g\}] = \theta z + s(\theta, z, g, e, q)$, for some function $s()$ that depends on firm's characteristics.

Consider first the effect on committed credit lines. If it takes up the guarantee program, the

lender's participation constraint is given by:

$$\int_{-\infty}^{\hat{\rho}(g,f)} \theta z + \underbrace{s(\theta, z, g, e, q) - f}_{\text{effective subsidy}} - \rho dF(\rho) = 0$$

This expression makes clear the first two effects of the guarantee program: (i) There is selective take-up: only firms for which the protection from downside risk out weights the fee choose to participate. For a given fee f this favor participation from riskier firms with more downside, differently from the subsidy that would be taken up by all firms. (ii) There is an expected fiscal cost of the program: indeed only firms for which there is an effective subsidy $s(\theta, z, g, e, q) - f > 0$ participate. This is because pleageability constraints θ and lenders' participation constraints still have to hold. This cost is a general feature of models of public interventions with voluntary participation (Tirole, 2012; Philippon and Skreta, 2012; Philippon and Schnabl, 2013). On a loan-by-loan basis, the public sector loses money, which can in principle be justified by the externalities of liquidation on other parts of the economy.

Guarantees also impacts contracts with discretion. Intuitively, the guarantee removes the downside which in turn reduces the option value of learning. This makes monitoring and discretion less appealing. This has two effects, depending if the program is introduced ex-post ($t = 1$) or ex-ante ($t = 0$) for the firms. Ex-post, the guarantees increases the incentives to "rubber stamp" requests for funds that are not too large, because there less downside to learn about and protect from. Larger requests still trigger monitoring, unless the guarantee level is very high: there is an intuitive trade-off between credit volume and fiscal cost. Ex-ante, guarantees tend to favor committed credit lines over discretion.

Participation/loan purchases: In this simple framework, participation by the public sector in loans (or loan purchases) does not play any role. There is no constraint on the size of lender's lending portfolios and all payoff are linear in quantities. To capture the effect of participation programs, one would need to extend the model to include aggregate bank balance sheet constraints.

D. Loan Terms at Regional Banks

- List of regional banks as of 2019Q4: MT, Keycorp, Huntington, PNC, Fifth Third, SunTrust, BBT (now: Truist), US Bancorp, Citizens, Ally, Cap One, Regions

A.22-A.25 shows that our facts about loan terms hold for these regional banks as well: small firms have shorter maturity credit lines, engage in less maturity management, pledge more collateral and pay higher spreads. The magnitudes of differences across firms size are at least as large as in the full sample. In fact, they may offer harsher terms: for instance, 49% of small SMEs credit lines are demandable, while this fraction is only 29% in the whole sample. The main difference between regional banks and the larger universal banks is in the sets of firms they lend to, with regional banks tilting toward smaller borrowers relative to the univeral banks. Table A.26 shows that differences in dradowns during COVID are also equally striking for these banks: SME credit is virtually unchanged in 2020Q1, while large firms draw extensively. This additional evidence suggests that differences in loan terms and access to credit across firms we document are driven by firms characteristics rather than bank size.

Table A.22: ***Maturity at Origination/Renewal by Facility Type and Firm Size Category as of December 31, 2019 - Sample Restricted to Loans issued by Regional Banks.***

Maturity at Origination/Renewal	Demand	<1 year	1 year	1-2 year	2-4 years	4-5 years	>5 years	Obs.
Assets ($mil.)								
				Panel A: Revolving Credit Lines				
0-50	.49	.16	.17	.09	.043	.029	.013	12549
50-250	.24	.097	.08	.081	.16	.32	.033	3364
250-1000	.12	.027	.024	.048	.17	.57	.039	2271
1000-5000	.033	.014	.023	.024	.15	.73	.034	2369
5000-	.027	.039	.069	.037	.12	.68	.02	1717
				Panel B: Term Loans				
0-50	.0026	.045	.034	.02	.071	.32	.51	5760
50-250	.0017	.045	.031	.022	.14	.43	.33	2867
250-1000	.0006	.028	.018	.037	.14	.46	.31	1669
1000-5000	0	.034	.019	.042	.18	.55	.17	1187
5000-	0	.1	.072	.089	.24	.37	.12	844

Notes: The table reports the fraction of outstanding loans to each firm size group (assets in $million) by the maturity indicated in the table header. The maturity is as of the respective facility's origination date or alternatively the most recent renewal date if the facility has been renewed since origination. The sample includes all C&I loans in the Y-14 corporate loan schedule as of December 31, 2019 for which an origination or renewal date reported.

Table A.23: ***Maturity Management in Revolving Credit Lines and Term Loan by Firm Size Category- Sample Restricted to Loans issued by Regional Banks.***

Assets ($mil.)												
Original Maturity	1 year or less			1-2 years			2-4 years			more than 4		
	Before	After	N	Before	After	N	Before	After	N	Before	After	N
						Panel A: Credit Lines						
0-50	0	12	86541	2	20	18263	4	34	9813	50	60	7294
50-250	0	11	17193	6	20	7585	13	34	13113	39	57	18349
250-1000	0	12	3693	9	22	3013	21	35	11172	35	60	23230
1000-5000	0	12	2442	7	16	2406	25	36	15546	37	60	35434
5000-	0	12	4336	6	17	1869	24	37	10567	41	60	29015
						Panel B: Term Loans						
0-50	0	4	7648	0	18	3483	14	36	14070	25	63	64338
50-250	0	3	3816	3	19	2515	16	36	12884	41	60	39571
250-1000	0	6	1266	13	19	1209	25	36	6664	41	58	21751
1000-5000	0	5.5	1005	2	21	991	22	36	6427	39	60	16210
5000-	-1	2	2663	10	24	1461	24	36	5365	40	60	8889

Notes: The table reports the median maturity (in months) before and after a credit facility is renewed. Facilities are grouped by their maturity at origination/recent renewal date as noted in the header. Demand loans are excluded from the sample. The sample is restricted to all renewals of revolving credit lines (Panel A) and term loans (Panel B) reported between 2015Q1 through 2019Q4.

Table A.24: ***Collateral Use by Facility Type and Firm Size Category as of December 31, 2019- Sample Restricted to Loans issued by Regional Banks.***

Collateral Type	Real Estate	Cash	AR & Inventory	Fixed Assets	Other	Blanket Lien	Unsecured	Obs.
Assets ($mil.)								
			Panel A1: Revolving Credit Lines (Non-Demand Loans)					
0-50	.028	.014	.61	.041	.094	.18	.041	10925
50-250	.035	.035	.49	.056	.11	.19	.083	3691
250-1000	.02	.083	.39	.041	.12	.2	.14	2801
1000-5000	.01	.073	.36	.039	.12	.12	.29	3368
5000-	.0028	.04	.16	.021	.083	.046	.65	2460
			Panel A2: Revolving Credit Lines (Demand Loans)					
0-50	.0048	.0058	.7	.041	.024	.17	.058	7969
50-250	.0041	.017	.35	.16	.04	.12	.31	1464
250-1000	.0014	.015	.17	.16	.021	.034	.6	727
1000-5000	0	.028	.088	.011	.021	.028	.83	566
5000-	0	.007	.038	.007	.007	.019	.92	426
				Panel B: Term Loans				
0-50	.47	.0059	.19	.14	.036	.11	.035	9542
50-250	.25	.02	.17	.28	.056	.19	.029	4087
250-1000	.13	.048	.13	.35	.064	.23	.055	2160
1000-5000	.059	.053	.17	.21	.1	.19	.22	1467
5000-	.024	.032	.12	.3	.095	.076	.36	1054

Notes: The table reports the fraction of loan commitments to each firm size group (by assets in $million) with the type of collateral indicated in the table header. The sample includes all loans in the Y-14 corporate loan schedule as of Deember 31, 2019.

Table A.25: ***Pricing of Revolving Credit Lines and Term Loans by Firm Size Category- Sample Restricted to Loans issued by Regional Banks.***

Dependent variable	Interest Rate (in bp)						
Sample	Credit Lines				Term Loans		
	(1)	(2)	(3)	(4)	(5)	(6)	(7)
50-250 (in mil)	-69.8***	-25.5***	-29.4***	-29.6***	-11.0***	-5.5*	0.4
	(4.2)	(2.9)	(3.0)	(3.0)	(3.3)	(2.4)	(2.4)
250-1000	-73.6***	-27.8***	-35.8***	-35.6***	-7.3	2.0	7.7
	(6.4)	(4.5)	(5.1)	(5.1)	(5.6)	(4.1)	(4.1)
1000-5000	-75.6***	-63.3***	-71.9***	-71.4***	-69.1***	-47.0***	-34.9***
	(4.0)	(4.0)	(5.0)	(5.0)	(4.8)	(3.9)	(4.0)
5000-	-116.0***	-79.6***	-83.3***	-83.2***	-104.4***	-69.5***	-55.3***
	(4.9)	(6.0)	(7.1)	(7.1)	(6.3)	(4.7)	(4.8)
Reference-Rate-Time FE	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Industry-Time FE	No	Yes	Yes	Yes	No	Yes	Yes
Bank-Time FE	No	Yes	Yes	Yes	No	Yes	Yes
Rating-Time FE	No	Yes	Yes	Yes	No	Yes	Yes
Firm Financial Controls	No	Yes	Yes	Yes	No	Yes	Yes
Loan Terms Controls	No	No	Yes	Yes	No	No	Yes
Drawdown	No	No	No	Yes	No	No	Yes
No of Firms	19088	16483	16452	16452	13995	11920	11887
N	56499	46858	46723	46723	25310	22121	21817
R^2	0.314	0.558	0.564	0.565	0.270	0.556	0.579

Notes: Results from estimating a model of the following type: $\text{Interest}_{\ell,t} = \sum_{s \neq \{\$0-50m\}} \beta_{1,s} \mathbb{I}\{\text{size class} = s\} + \Gamma' X_t + \epsilon_{\ell,t}$ where $\text{Interest}_{\ell,i,b,t}$ is the interest on facility ℓ from bank b to firm i at time t. The sample contains originations and renewals between 2015Q1 and 2019Q4. Industry×time fixed effects are at the NAICS 3 digit level. Rating×time fixed effects are categorical variables for 10 internal loan rating categories. Firm financial controls are lagged debt/assets, cash and receivables/assets, net income/assets, and operating income/interest expense. Loan term controls are six maturity categories (demand loans, 0-6 months, 6-12 months, 1-2 years, 2-4 years, more than 4 years), six collateral classes (real restate, marketable securities, accounts receivables and inventory, fixed assets, other, and unsecured or blanket lien), and total credit line commitment over total assets. Robust standard errors are clustered at the firm level in parentheses; *, **, and *** indicate significance at the 10%, 5%, and 1% level, respectively.

Table A.26: *Aggregate Drawdowns in $B by Firm Type, 2019Q4-2020Q2- Sample Restricted to Loans issued by Regional Banks.*

	Total Credit			Term Loans			CL Drawdowns (all facilities)			CL Drawdowns (pre-existing facilities)		
	2019Q4	2020Q1	2020Q2	2019Q4	2020Q1	2020Q2	2019Q4	2020Q1	2020Q2	2019Q4	2020Q1	2020Q2
Panel A: By Firm Size (in Assets in $mil)												
Not classified	41.4	43.0	43.9	19.9	20.6	21.4	11.7	12.8	12.0	10.3	11.7	10.1
0-50	92.5	93.0	76.4	29.4	29.6	29.4	54.6	54.7	37.9	53.0	53.6	36.6
50-250	81.0	83.7	73.2	28.4	28.8	26.4	39.6	42.2	33.0	38.6	41.4	32.0
250-1000	73.3	83.8	74.5	22.8	23.9	20.4	40.0	49.3	41.4	38.5	48.2	40.0
1000-5000	95.0	120.8	104.9	28.5	30.5	26.4	48.0	71.5	58.0	47.5	71.1	57.0
5000-	74.0	105.6	87.6	24.7	28.9	26.2	26.5	52.8	36.4	26.0	52.6	34.8
	457.3	529.9	460.4	153.7	162.3	150.0	220.4	283.3	218.7	213.9	278.5	210.6

Notes: The table reports the total dollar amount (in $B) of utilized credit pooling all facilities, revolving credit lines only, and revolving credit lines of firms that had a facility open as of the previous quarter.

E. Private vs. Public Firms

Table A.27: ***Remaining Maturity by Facility Type and Firm Size Category for Loans Outstanding between 2017Q1-2019Q4***

Loan Due:	Demand	Jan	Feb	Mar	Q2	Q3-Q4	2021	2022-24	Later	Obs.
Assets (mil.)										
					Panel A1: Revolving Credit Lines for Private Firms					
0-50	.29	.042	.046	.051	.17	.23	.11	.04	.023	429262
50-250	.18	.022	.024	.028	.082	.15	.18	.22	.12	124015
250-1000	.13	.0086	.0093	.012	.038	.084	.15	.35	.23	68935
1000-5000	.096	.0049	.006	.0075	.023	.054	.13	.42	.29	40876
5000-	.097	.012	.0094	.013	.033	.075	.12	.37	.29	16832
					Panel A2: Revolving Credit Lines for Public Firms					
0-50	0	.038	.05	.059	.15	.25	.13	.059	.031	8774
50-250	0	.011	.014	.014	.044	.096	.18	.35	.2	6416
250-1000	0	.0025	.0039	.0047	.015	.039	.13	.44	.32	24182
1000-5000	0	.0017	.0017	.003	.009	.025	.11	.47	.33	68519
5000-	0	.0072	.0074	.0083	.021	.046	.1	.42	.36	86389
					Panel B1: Term Loans for Private Firms					
0-50	.0015	.006	.0062	.0079	.018	.036	.068	.22	.65	262199
50-250	.0013	.0064	.0059	.0077	.02	.044	.11	.36	.46	100486
250-1000	.0015	.0045	.0047	.007	.016	.043	.13	.38	.43	42007
1000-5000	.000061	.0034	.0068	.008	.021	.05	.11	.35	.47	16371
5000-	0	.0056	.0085	.013	.037	.08	.15	.35	.38	6205
					Panel B2: Term Loans for Public Firms					
0-50	0	.0052	.0069	.011	.019	.038	.075	.23	.62	5199
50-250	0	.0043	.0074	.0045	.013	.029	.095	.41	.45	4217
250-1000	0	.002	.0017	.0043	.009	.028	.11	.42	.44	7522
1000-5000	0	.0029	.0026	.0035	.0096	.029	.11	.47	.4	22570
5000-	0	.019	.012	.013	.034	.076	.14	.39	.33	24349

Notes: The table reports the fraction of loans to each firm size group (assets in $milion) with remaining maturity indicated in the table header. The sample includes all C&I loans in the Y-14 corporate loan schedule reported as outstanding between 2017Q1 and 2019Q4

Table A.28: ***Collateral Use by Facility Type and Firm Size Category, 2017Q1-2019Q4***

Collateral Type	Real Estate	Cash	AR & Inventory	Fixed Assets	Other	Blanket Lien	Unsecured	Obs.
Assets (mil.)								
Panel A1: Revolving Credit Lines for Private Firms								
0-50	.023	.015	.46	.034	.046	.39	.042	306703
50-250	.027	.025	.45	.059	.075	.27	.096	101954
250-1000	.018	.038	.37	.054	.11	.23	.18	60042
1000-5000	.0091	.036	.33	.043	.11	.17	.3	36949
5000-	.0025	.019	.13	.016	.075	.077	.68	15191
Panel A2: Revolving Credit Lines for Public Firms								
0-50	.018	.022	.44	.031	.045	.41	.043	6803
50-250	.012	.028	.44	.065	.077	.28	.1	5796
250-1000	.0035	.045	.39	.047	.097	.26	.16	22374
1000-5000	.0029	.045	.3	.041	.1	.18	.33	63763
5000-	.00092	.021	.098	.02	.072	.072	.72	81466
Panel B1: Term Loans for Private Firms								
0-50	.5	.0063	.1	.11	.023	.25	.022	261812
50-250	.25	.013	.13	.29	.044	.23	.035	100353
250-1000	.17	.027	.13	.33	.053	.21	.073	41942
1000-5000	.15	.025	.12	.25	.088	.19	.19	16370
5000-	.049	.0087	.049	.27	.077	.12	.43	6205
Panel B2: Term Loans for Public Firms								
0-50	.46	.0054	.081	.11	.021	.29	.032	5191
50-250	.17	.02	.17	.23	.059	.3	.061	4215
250-1000	.02	.04	.23	.2	.083	.33	.11	7520
1000-5000	.015	.041	.19	.12	.081	.23	.32	22568
5000-	.0082	.025	.11	.15	.07	.15	.49	24347

Notes: The table reports the fraction of loan commitments to each firm size group with the type of collateral indicated in the table header. The sample includes all loans in the Y-14 corporate loan schedule as of 2019Q4.

Table A.29: ***Interest Rates by Facility Type and Firm Size Category between 2017Q1-2019Q4***

Interest in bp	0 -100	100-200	200-300	300-400	400 -500	500 -600	>600	Obs.
Assets (mil.)								
				Panel A1: Revolving Credit Lines for Private Firms				
0-50	.019	.011	.065	.25	.37	.22	.062	294042
50-250	.045	.035	.16	.35	.23	.1	.083	86557
250-1000	.061	.039	.15	.32	.22	.12	.1	50562
1000-5000	.074	.017	.18	.33	.22	.11	.078	34843
5000-	.17	.054	.23	.32	.13	.057	.047	12297
				Panel A2: Revolving Credit Lines for Public Firms				
0-50	.036	.0049	.064	.28	.35	.16	.1	609
50-250	.062	.0077	.11	.29	.24	.14	.15	2352
250-1000	.072	.0093	.13	.33	.24	.12	.099	11769
1000-5000	.083	.028	.2	.38	.18	.063	.056	32005
5000-	.18	.046	.22	.36	.11	.049	.042	20926
				Panel B1: Term Loans for Private Firms				
0-50	.015	.0039	.063	.33	.44	.12	.027	267099
50-250	.021	.0084	.14	.38	.3	.088	.058	103035
250-1000	.032	.015	.17	.37	.24	.083	.081	44211
1000-5000	.044	.015	.21	.41	.21	.064	.047	20943
5000-	.068	.031	.25	.42	.18	.031	.019	11818
				Panel B2: Term Loans for Public Firms				
0-50	.053	0	.11	.24	.34	.16	.099	282
50-250	.024	.014	.099	.28	.26	.21	.12	1631
250-1000	.061	.0078	.1	.33	.3	.12	.082	5232
1000-5000	.052	.023	.21	.45	.2	.037	.024	17995
5000-	.1	.033	.27	.42	.13	.035	.015	18733

Notes: The table reports the fraction of loan commitments to each firm size group with the interest rate indicated in the table header. Note that prices for credit lines are only reported if the drawdown is larger than zero. The sample includes all loans in the Y-14 corporate loan schedule as of 2019Q4.