

# Online Appendix

for  
Bank Competition and Information Production

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## A1. Data on loan announcements, 1980-1992

The database has been built in two steps. First, we have obtained data in the Lexis Nexis database (data collection). Then, we have cleaned the data, with a view to classifying the loan announcements of interest (data cleaning). We shall now delve into both these processes in turn.

**Data collection** In order to gather the raw data, we have proceeded via setting up manually a canned query, according to Lexis Nexis guidelines.<sup>14</sup> Via this toolbox, we have searched for the articles that shared the following characteristics:

- Contained at least one of the following keywords: BANK LOAN, CREDIT AGREEMENT, CREDIT FACILITY, LOAN FACILITY, SYNDICATE. In particular, we have used the embedded function “HLEAD”, which searches for the desired query in the “article title plus section headings plus first paragraph”.
- Pertained to the United States of America.

Such a procedure was carried out for all years between 1980 and 1992, and for each search we downloaded the list of article manually in different file formats: text, Excel, and HTML, which were subsequently used for our data cleaning process. An example of the canned query for the year 1980 is as follows:[http://www.lexisnexis.com/hottopics/lnacademic/?verb=sr&csi=8412&sr=HLEAD\(bank+loan+OR+line+of+credit+OR+credit+](http://www.lexisnexis.com/hottopics/lnacademic/?verb=sr&csi=8412&sr=HLEAD(bank+loan+OR+line+of+credit+OR+credit+)

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<sup>14</sup><http://www.amdev.net/docs/>

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agreement+OR+credit+facility+OR+credit+line+OR+loan+facility+OR+
syndicate)+AND+Terms (United+States)+AND+DATE%3E=01/01/
1980+AND+DATE%3C=12/31/1980
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**Data cleaning** The articles obtained from the data gathering process above were 9656. We have first proceeded to splitting such article according to the indexes provided by LexisNexis, e.g. “DATELINE”, “SUBJECT”, “COUNTRY”, as well as creating a new index labeled “FULLTEXT” to categorize the full text of each article. After creating such filters, we have proceeded to cleaning the list from the false positive results, i.e., those articles that were not loan announcements, through a two-step process:

- First, we have eliminated those articles in the list that were most obviously unrelated to the purpose of our study. In order to do this, we have focused our attention on the “SUBJECT” field and obtained the count by subject for all of the observations. Through this, we have been able to identify alien subjects with respect to our purposes, such as: sailing, boat racing, law enforcement, crime, sport events...
- We have manually classified the remaining 5680, by discriminating between loan announcements and false positives. In such a context, we have also proceeded to manually extract both the name of the company dealt with in the article and its ticker.

The latter two elements were then used to match each article with the corresponding company stock price data obtained from the CRSP database. By means of this, we have been able to obtain an integrated database associating the monthly stock prices of each company interested by a loan announcement with the announcement itself.

TABLE A1

**Robustness: “Stacked” DID**

This table provides robustness for the estimates in equation (3). “Stacked” DID follows the methodology outlined in Cengiz et al. (2019). The dependent variable is the cumulative abnormal return around the loan announcement date,  $CAR(-1,3)$ .  $RS\_INDEX$  is the Rice and Strahan (2010) deregulation index. Deal and borrower controls are defined in Table II. Wild bootstrap t-stat are presented in parentheses. \*, \*\*, and \*\*\* denote significance at the 10%, 5%, and 1%, respectively.

	1	2	3
$RS\_INDEX$	-0.256*** (-3.998)	-0.264*** (-3.414)	-0.246*** (-2.814)
Fixed effects			
State	Yes	Yes	-
Year	Yes	-	-
Industry-Year	No	Yes	Yes
Firm	No	No	Yes
Borrower and Deal controls	No	No	Yes
Observations	12869	12869	12869
$R^2$	0.005	0.063	0.294

TABLE A2

**CAR and Bank Competition: 5 Fama-French factors**

This table provides estimates for equation (3). The dependent variable is the cumulative abnormal return, calculated using the 5 factor model, around the loan announcement date,  $CAR(-1,3)$ .  $RS\_INDEX$  is the Rice and Strahan (2010) deregulation index. Deal and borrower controls are defined in Table II. Wild bootstrap t-statistics are presented in parentheses. \*, \*\*, and \*\*\* denote significance at the 10%, 5%, and 1%, respectively.

	1	2	3	4	5	6
$RS\_INDEX$	-0.163*** (-4.160)	-0.169*** (-5.381)	-0.146*** (-3.924)	-0.147*** (-3.857)	-0.144*** (-3.987)	-0.145*** (-3.917)
Fixed effects						
State	Yes	Yes	-	-	-	-
Year	Yes	-	-	Yes	-	-
Industry-Year	No	Yes	Yes	Yes	Yes	Yes
Firm	No	No	Yes	Yes	Yes	Yes
Observations	16718	16718	16718	16718	16718	16718
$R^2$	0.004	0.057	0.269	0.269	0.269	0.269

TABLE A3

**CAR and Bank Competition: Different event windows**

This table provides estimates for equation (3). The dependent variable is the cumulative abnormal return around the bond announcement date, CAR(-1,3). RS\_INDEX is the Rice and Strahan (2010) deregulation index. Wild bootstrap t-statistics are presented in parantheses. \*, \*\*, and \*\*\* denote significance at the 10%, 5%, and 1%, respectively.

	CAR(-1,1)		CAR(-1,5)		CAR(-1,10)	
	1	2	3	4	5	6
RS_INDEX	-0.174*** (-4.056)	-0.173*** (-4.446)	-0.208** (-2.605)	-0.215** (-2.305)	-0.263** (-2.225)	-0.134 (-1.523)
Fixed effects						
State	Yes	-	Yes	-	Yes	-
Year	Yes	-	Yes	-	Yes	-
Industry-Year	No	Yes	No	Yes	No	Yes
Firm	No	No	Yes	Yes	Yes	Yes
Borrower and Deal controls	Yes	Yes	Yes	Yes	Yes	Yes
Observations	15452	15452	15452	15452	15452	15452
$R^2$	0.006	0.276	0.008	0.294	0.007	0.293

TABLE A4

**Interstate Branching and Credit supply**

The dependent variable is the all-in-drawn spread in columns (1-3) and the log of the deal amount in columns (4-6). The unit of observation is a loan tranche (FacilityID). RS\_INDEX is the Rice and Strahan (2010) deregulation index. Deal and borrower controls are defined in Table II. Wild bootstrap t-statistics are presented in parantheses. \*, \*\*, and \*\*\* denote significance at the 10%, 5%, and 1%, respectively.

	All-in drawn spread			Log(Loan Amount)		
	1	2	3	4	5	6
RS_INDEX	0.020*** (2.860)	0.010 (1.225)	0.012 (1.172)	0.008 (0.729)	0.007 (0.644)	-0.022** (-2.097)
Fixed effects						
State	Yes	Yes	–	Yes	Yes	–
Year	Yes	–	–	Yes	–	–
Industry-Year	No	Yes	Yes	No	Yes	Yes
Firm	No	No	Yes	No	No	Yes
Borrower and Deal controls	Yes	Yes	Yes	Yes	Yes	Yes
Observations	18712	18712	18712	18712	18712	18712
$R^2$	0.518	0.564	0.804	0.758	0.780	0.895