Online Appendix of "Credit Stimulus, Executive Ownership, and Firm Leverage"

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A. In-Depth Sample Description

For our focal sample period of 2007-2010, we have 5,898 firm-year observations, of which, 2,914 observations are related to 769 firms with zero executive ownership and 2,984 observations are related to 778 firms with non-zero executive ownership.[1]

First, we provide sector wise descriptions of the firms given in Table A1.

Insert Table A1 about here

Next, we compare zero executive ownership firms with non-zero executive ownership firms across sixteen firm-characteristics including profitability, size, and market to book ratio. The results given in Table A2 show that these two groups of firms differ significantly on a number of these firm characteristics. For example, the non-zero executive ownership firms are significantly larger and more profitable. We include all the variables from Panel B of Table 1 for this comparison purpose.

In addition, we focus on the subset of firms that report non-zero executive ownership and conduct a similar comparison between the top quartile executive ownership firms and all other firms within this subset. We have 2,984 non-zero executive ownership firm-year observations, of which, 764 are by top-quartile executive ownership firms and the 2,220 observations are by non top quartile (but positive) executive ownership firms (Table A3). Again, we find that, on average, top quartile firms differ significantly compared to the non top quartile firms across multiple firm characteristics. For example, high executive ownership firms are more profitable (both higher ROA as well as fraction of firms that report a positive net income) and have a higher market to book ratio.

Insert Table A2 and Table A3 about here

[1] This classification between the firms is done based on the 2008 executive ownership level.

B. Comparison of Loan Characteristics Across Firms with Different Levels of Executive Ownership

To explore if there are meaningful differences in types of loans taken by low and high executive ownership firms, we focus on four loan characteristics that are reported for all loans in the CSMAR-BLCLC dataset: the frequency of borrowing, size of the loan, collateral status, and the lender identity. We were able to match 631 firms in our original sample to the CSMAR-BLCLC database for the 2006-2008 period. We first divide the 631 matched firms in two groups. One group consists of firms that report zero executive ownership (as of the end of 2008). The other group comprises of firms that report a positive level of executive ownership.

There are 302 firms with zero executive ownership and 329 firms that have some level of executive ownership. The non-zero executive ownership firms borrow more frequently during the pre-shock period of 2006-2008 compared to the zero executive ownership firms (3.61 versus 3.07), however this difference is statistically not significant. Similarly, the difference in the average loan size of non-zero (RMB 657 million) and zero executive ownership firm (RMB 510 million) is statistically insignificant. Almost all loans are secured by collateral and the fraction of unsecured loans is quite low for both zero-executive ownership firms (1%) and non-zero executive ownership firms (2%) and this difference is marginally significant.

Finally, we examine the identity of the lending bank. Nearly one third of loans are provided by banks that are classified as government-controlled banks.[2] The fractions of total loans issued by these central government-controlled banks to the zero (0.34) and non-zero executive ownership firms are very similar (0.36) and their difference is not statistically significant.

We repeated this analysis by comparing the firms in the top quartile executive ownership level to the remaining firms. Thus, the 631 matched firms are now assigned to two groups: 171 firms in the top-quartile executive ownership level (top-quartile) and 460 firms that belong to the other three quartiles of executive ownership level (others).

The comparison of the loan characteristics again shows that the two groups (top quartile firms and other firms) are similar in frequency of borrowing, average loan amount and fraction borrowed from banks controlled by the central government. The only characteristic on which these two groups differ significantly is the fraction of loans that are unsecured (3% for the top-quartile versus 1% for the others).

Taken together, these two analyses suggest that the bank-borrower relationships were largely similar for the high and low executive ownership firms in the period immediately before the credit stimulus.

[2]This group consists of 9 banks: 1) Bank of China; 2) Agricultural Bank of China; 3) Construction Bank; 4) Industrial and Commercial Bank of China; 5) Bank of Communications; 6) China Development Bank; 7) Export Import Bank; 8) Agricultural Development Bank, and 9) Postal Savings Bank of China.

C. Estimation of Borrowing Cost: Pre and Post and Credit Push

One firm characteristic that deserves a special mention is the Interest Expense Ratio, which captures the borrowing costs of a firm. We estimate this variable following Pittman and Fortin (2004) as the ratio of interest expenses to total debt:

$$\text{Borrowing Cost} = \text{Interest Expense Ratio} = \frac{InterestExpense}{ShortTermDebt+LongTermDebt} \tag{A1}$$

While the visual evidence provided in Figure 4 points to a significant downward shift in borrowing costs, we test this more formally by estimating a regression model of the following form:

$$\begin{aligned} Borrowing\ Cost = {} & \beta_0 + \beta_1 LeverageRatio_{it} + \beta_2 Credit\,Push_t + \\ & + \beta_3 LeverageRatio_{\,it} \times Credit\,Push_t + \\ & + \sum_k \beta_k Controls_{itk} + \alpha_{jt} + u_{it}. \end{aligned} \tag{A2}$$

where the Borrowing Cost is the interest expense ratio as defined in (A1), *Book Leverage*$_{it}$ is as defined in equation 1 in the paper, *CreditPush*$_t$ is a dummy variable that equals one for post-stimulus period and zero for pre-stimulus period, and α_j is the industry fixed effect. The controls $\sum_k \beta_k Controls_{itk}$ are return to assets, size of the firm, market-to-book ratio and bank holding.

We report the results in Table A4. The key coefficients of interest are *CreditPush*$_t$ and its interaction with *BookLeverage*$_{it}$. In column 1 of Panel A we present the results where we control for the firm characteristics and include any fixed effects. We obtain a coefficient of -0.35 for *CreditPush*$_t$. The coefficient for $BookLeverage_{it} \times Credit\,Push_t$ is -0.75, and it is significant at one percent level. Thus, while the credit push lowers the cost of borrowing across all firms, it is especially powerful in reducing the borrowing costs for firms that choose high leverage.

In other columns from 2 through 4, we re-estimate our benchmark regression specification by introducing industry fixed effects and using the market leverage as alternative specifications. Our results hold for these alternative specifications as well.

Insert Table A4 about here

We also re-estimate equation A2 for the shorter sample period of 2008-2009. Our findings, reported in Table A5, show identical results.

D. Bank Firm Relationship: Pre and Post Credit Shock

We have been able to match 631 firms with 2116 loans related to these firms from our original sample to the CSMAR-BLCLC database over the 2006-2008 period. We classify all firms into two groups based on their executive ownership levels as of 2008. We rank the firms based on this variable. The first group consists of firms that are in the top quartile and the second group consists of the remaining firms. As before, we focus on the four loan characteristics that are reported for all loans and compare these for pre and post credit push periods. For the top quartile firms, the average loan size goes up from RMB 454 million to RMB 458 million.

Although this suggests that the average size of loans taken by the top quartile firms increases by almost RMB 4 million on average, this difference is not statistically significant. In contrast, the average loan size for other firms (not top-quartile) decreases from RMB 645 million to RMB 642 million. This drop is also statistically not significant.

The changes in other bank-loan characteristics such as frequency, collateral status and the lender identity for both top-quartile firms and other firms were found to be insignificant. This suggests that over time, bank-firm relationships remained stable and any observable increase in the leverages is caused by the credit shock.

E. Description of Propensity Score Matching Procedure

We start the matching process by creating the treatment group based on executive ownership at the end of 2008. All firms with ownership levels in the top quartile in 2008 are assigned to the high ownership (treated) group. Specifically, we create a dummy variable $TopQuartile$ which equals one if the firm ranks in the top 25% firms based on the executive ownership in 2008 and zero otherwise.

In the second step, we estimate a probit regression model using the $TopQuartile$ as the dependent variable and a large set of observable firm characteristics which include all firm-level control variables from the benchmark regression model (equation 3) and additional controls: CEO turnover, whether the CEO and the chairman of the board is the same person, whether the firm has a compensation committee, the size of the board and the proportion of independent directors in the board. The choice of these additional control variables for the executive ownership is motivated by their use in prior studies of the determinant of incentive pay for the managers (Bettis et al. 2010; Dittmann et al. 2010; Kato et al. 2005; and Bertrand and Mullainathan, 2001).

The probit model is estimated over the entire cross-section of firms in our sample. This estimation allows us to calculate the predicted probability of being a top quartile executive ownership firm in 2008. We hope to find a matching firm for each top quartile executive ownership firm based on predicted probability (propensity score). This matched firm will be statistically indistinguishable from the treatment firm based on observable characteristics but

will not have a high executive ownership. We employ a one-to-one matching process as outlined by D'Acunto and Rossi (2017).

The validity of the matching process is illustrated in Table A11 of the Online Appendix. The first three columns under the heading "Pre-Matching" report the sample average of various firm characteristics of top-quartile executive ownership firms, of all the remaining firms (before we created matched pairs) and the t-statistics of the differences between the treatment (i.e. top-quartile firms) and the control (i.e. remaining firms) groups.

The last three columns reported under the heading "Post-Matching" repeat the same analysis but compare the top-quartile executive ownership firms to the propensity score matched firms (we were able to find matches for 303 out of 375 top quartile firms). The t-test for difference in observable firm characteristics is insignificant for all sixteen attributes.

These results provide strong evidence that our matching process yields firm pairs that are statistically indistinguishable based on observable firm characteristics.

F. Using Equity-to-Salary Ratio

Our primary measure of managerial incentives in this paper is the fraction of firm's equity owned by its executives. This measure captures the accumulated stock holding of a firm's managers. An alternative approach to measure the executive pay-performance sensitivity is to use the ratio of the value of the stock ownership to the annual fixed cash compensation. We re-estimate our baseline specification using this alternative pay-performance sensitivity measure, denoted as equity-to-salary-ratio. We denote this new measure as $Equity\,to\,Salary_{i,2008}$. This ratio is defined as:

$$Equity\,to\,Salary_{i,2008} = \frac{Market\,Value\,of\,the\,Equity_{i,2008} \times Executive\,Ownership_{i,2008}}{Cash\,Salary\,of\,the\,Executives_{i,2008}} \tag{A3}$$

Where $Market\,Value\,of\,the\,Equity_{i,2008}$ is the market value of the firm at the end of 2008 and $Executive\,Ownership_{i,2008}$ is the executive ownership level of the firm at the end of 2008. The $Cash\,Salary\,of\,the\,Executives_{i,2008}$ is the average cash salary of the top three executives of the firms at the end of 2008.[3] We modify the baseline specification of equation 3 above by replacing $Executive\,Ownership_{it}$ by $Equity\,to\,Salary_{i,2008}$. The new model specification is given by:

[3]Due to data limitations, the $CashSalaryoftheExecutives_{i,2008}$ variable only includes the cash salaries of the top three executives from each firm. In addition, the Equity to Salary ratio changes over the 4 years of our research period due to the change in stock price. So, we fix this ratio at year 2008.

$$
\begin{aligned}
Leverage\,Ratio_{it} = \beta_0 + \beta_1 EquitytoSalary_{i,2008} + \beta_2 Credit\,Push_t + \\
+ \beta_3 EquitytoSalary_{\,i,2008} \times Credit\,Push_t + \\
+ \sum_k \beta_k Controls_{itk} + \alpha_{jt} + u_{it}. \qquad \text{(A4)}
\end{aligned}
$$

The results of this alternative measure of executive pay-performance sensitivity for book leverage are reported in Table A26 and for market leverage are reported in Table A27. Again the results are consistent with our original findings.

Thus, our core findings are robust to this alternative definition of pay for performance sensitivity of executives both in the immediate aftermath of the credit shock and over a longer, four year period. However, for the longer sample period, the effect of the credit shock becomes weaker for book leverage. This diminishing impact of the credit shock on book leverage in the longer sample period is caused by other factors that existed in the market at that time.

Online Appendix Tables

Table A1. Decomposition Per Sector

			Mean			
Industry	# Obs	% Obs	Int. Cost	Book Lev.	Market Lev.	Ex. Own.
Agriculture	97	1.64	3.12	0.42	0.17	2.14
Mining	222	3.76	2.45	0.45	0.18	0.14
Manufacturing	3393	57.53	2.83	0.48	0.24	2.43
Energy	310	5.26	3.81	0.59	0.38	0.02
Building	154	2.61	1.79	0.67	0.43	1.80
Wholesale & Retail	484	8.21	2.37	0.56	0.29	0.10
Transportation	247	4.19	2.72	0.45	0.28	0.01
Hotel and Catering	36	0.61	2.64	0.34	0.13	0.15
Information	162	2.75	2.01	0.38	0.16	5.87
Real Estate	493	8.36	1.97	0.57	0.33	0.42
Leasing & Business	63	1.07	2.33	0.47	0.25	3.72
Science & Technology	16	0.27	0.82	0.53	0.17	0.19
Environment	58	0.98	3.11	0.48	0.21	0.03
Education	4	0.07	4.09	0.55	0.29	0.04
Health & Social Welfare	8	0.14	0.91	0.17	0.05	0.00
Culture $ Sports	60	1.02	2.25	0.46	0.18	0.28
Comprehensive	91	1.54	2.83	0.52	0.29	0.01
Total	5898	100	2.70	0.50	0.26	1.73

Note: This table reports sector specific sample statistics of firms present in the database and contains the interest cost, book leverage, market leverage and executive ownership in percentage levels for comparison purposes. The variables are defined in the Appendix. The sample covers 2007-2010 and uses 2008 executive ownership level for classification purposes. Source: CSMAR.

Table A2. Comparison Between Zero and Non-Zero Executive Ownership Firms

Variable	# Obs.		Non-Zero	Zero		
	Non-zero	Zero	Mean	Mean	t-stat	p-values
ROA (net)	2984	2914	0.07	0.06	-5.64	0.00
Firm Size	2984	2914	21.22	20.96	-6.52	0.00
Market Book	2984	2914	2.24	2.24	0.07	0.95
Stock Holding Concentration	2984	2914	0.15	0.20	15.78	0.00
Institution Ownership	2984	2914	0.07	0.06	-3.53	0.00
SOE	2984	2914	0.49	0.55	4.70	0.00
Positive Net Profit	2984	2914	0.92	0.89	-4.20	0.00
Foreign Holding	2984	2914	0.05	0.07	4.34	0.00
Dividend	2984	2914	0.59	0.47	-9.16	0.00
Bank Holding	2984	2914	0.03	0.03	-0.53	0.60
Asset Tangibility	2984	2914	0.27	0.28	2.36	0.02
CEO Turnover	2984	2914	0.17	0.22	5.28	0.00
CEO Chairman	2886	2830	0.82	0.88	5.95	0.00
Compensation Committee	2984	2914	0.83	0.83	0.24	0.80
Board Size	2938	2865	9.26	9.19	-1.42	0.16
Board Independence	2938	2865	0.36	0.36	2.46	0.01

Note: This table compares between the zero and non-zero executive ownership firms across the sixteen firm characteristic variables for the sample period 2007-2010 and uses 2008 executive ownership level for classification purposes. The variables are defined in the Appendix.

Table A3. Comparison Between Top Quartile Executive Ownership Firms and Other Firms

Variable	# Obs.		Top Quartile	Others		
	Top Quartile	Others	Mean	Mean	t-stat	p-values
ROA (net)	764	2220	0.08	0.06	-8.68	0.00
Firm Size	764	2220	20.66	21.41	13.60	0.00
Market Book	764	2220	3.15	1.93	-16.42	0.00
Stock Holding Concentration	764	2220	0.15	0.15	-0.08	0.93
Institution Ownership	764	2220	0.06	0.08	4.61	0.00
SOE	764	2220	0.13	0.61	24.92	0.00
Positive Net Profit	764	2220	0.95	0.91	-4.25	0.00
Foreign Shareholding	764	2220	0.06	0.04	-1.42	0.16
Dividend	764	2220	0.67	0.57	-4.98	0.00
Bank Holding	764	2220	0.01	0.04	4.52	0.00
Asset Tangibility	764	2220	0.23	0.28	6.99	0.00
CEO Turnover	764	2220	0.14	0.18	2.66	0.01
CEO Chairman	740	2146	0.67	0.87	12.53	0.00
Compensation Committee	764	2220	0.75	0.85	6.68	0.00
Board Size	753	2138	8.85	9.40	7.00	0.00
Board Independence	753	2185	0.36	0.36	-2.01	0.04

Note: This table compares between the top quartile executive ownership firms and other firms (only based on non-zero ownership firms) across the sixteen firm characteristics variables based on the 2008 executive ownership level. The variables are defined in the Appendix.

Table A4. Cost of Leverage Before and After the Credit Push, 2007-2010

	Interest Expense			
	(1)	(2)	(3)	(4)
Book Leverage$_{it}$ × Credit Push$_t$	-0.750***	-0.714***		
	(0.003)	(0.004)		
Book Leverage$_{it}$	1.813***	2.184***		
	(0.000)	(0.000)		
Market Leverage$_{it}$ × Credit Push$_t$			-0.699***	-0.418*
			(0.002)	(0.063)
Book Leverage$_{it}$			1.849***	2.149***
			(0.000)	(0.000)
CreditPush$_t$	-0.345**	-0.349**	-0.492***	-0.539***
	(0.013)	(0.011)	(0.000)	(0.000)
Firm's Controls	Yes	Yes	Yes	Yes
Industry FE	No	Yes	No	Yes
Observations	4283	4283	4283	4283
R^2	0.123	0.205	0.117	0.194

Note: The sample covers 2007-2010. The controls are return to assets, size of the firm, market-to-book ratio, bank holding. p-values are in parentheses. *, ** and *** indicate significance at the 10%, 5% and 1% level. Standard errors are clustered at the firm level.

Table A5. Cost of Leverage Before and After the Credit Push, 2008-2009

	Interest Expense			
	(1)	(2)	(3)	(4)
Book Leverage$_{it}$ × Credit Push$_t$	-0.845***	-0.903***		
	(0.009)	(0.004)		
Book Leverage$_{it}$	1.732***	2.201***		
	(0.000)	(0.000)		
Market Leverage$_{it}$ × Credit Push$_t$			-0.861**	-0.744**
			(0.021)	(0.039)
Book Leverage$_{it}$			2.025***	2.382***
			(0.000)	(0.000)
CreditPush$_t$	-0.301	-0.256	-0.318**	-0.292**
	(0.125)	(0.184)	(0.032)	(0.044)
Firm's Controls	Yes	Yes	Yes	Yes
Industry FE	No	Yes	No	Yes
Observations	1956	1956	1956	1956
R^2	0.117	0.205	0.118	0.203

Note: The sample covers 2008-2009. The controls are return to assets, size of the firm, market-to-book ratio, bank holding. p-values are in parentheses. *, ** and *** indicate significance at the 10%, 5% and 1% level. Standard errors are clustered at the firm level.

Table A6. Executive Ownership and Market Leverage

Panel A: 2007-2010

	(1)	(2)	(3)
Executive Ownership$_{it}$ × Credit Push$_t$	0.134***	0.125***	0.137***
	(0.000)	(0.001)	(0.001)
Executive Ownership$_{it}$	-0.115***	-0.090**	-0.116***
	(0.006)	(0.022)	(0.003)
Credit Push$_t$	-0.022***	-0.024***	-0.054*
	(0.000)	(0.000)	(0.091)
Firm's Controls	Yes	Yes	Yes
Industry FE	No	Yes	No
Industry × Year FE	No	No	Yes
Observations	5898	5898	5898
R^2	0.584	0.613	0.642

Panel B: 2008-2009

	(1)	(2)	(3)
Executive Ownership$_{it}$ × Credit Push$_t$	0.361***	0.343***	0.327***
	(0.000)	(0.001)	(0.001)
Executive Ownership$_{it}$	-0.255***	-0.229**	-0.220***
	(0.000)	(0.00)	(0.000)
Credit Push$_t$	-0.051***	-0.058***	-0.038*
	(0.000)	(0.000)	(0.094)
Firm's Controls	Yes	Yes	Yes
Industry FE	No	Yes	No
Industry × Year FE	No	No	Yes
Observations	3007	3007	3007
R^2	0.604	0.636	0.640

Note: The sample covers both the 2007-2010 (in Panel A) and 2008-2009 (in Panel B) periods and estimates equation 3 with Market Leverage as the dependent variable. Executive Ownership$_{it}$ is the number of shares owned by the executives divided by shares outstanding. Credit Push$_t$ denotes whether t $\geq$ 2009. Controls are: ROA, firm size, market-to-book ratio, assets tangibility, dividend, positive net profit, SOE, ownership concentration, institutional ownership, bank holding and foreign holding. We include industry and industry-year FE. p-values are in parentheses. *, ** and *** indicate significance at 10%, 5% and 1% levels. Standard errors are clustered at the firm level.

Table A7. Top Quartile Executive Ownership and Market Leverage

Panel A: 2007-2010

	(1)	(2)	(3)
$\text{TopQuartile}_{2008} \times \text{Credit Push}_t$	0.027***	0.023**	0.027***
	(0.000)	(0.000)	(0.000)
$\text{TopQuartile}_{2008}$	-0.028***	-0.023***	-0.021***
	(0.000)	(0.000)	(0.000)
Credit Push_t	-0.024***	-0.025***	0.050
	(0.000)	(0.000)	(0.115)
Firm's Controls	Yes	Yes	Yes
Industry FE	No	Yes	No
Industry × Year FE	No	No	Yes
Observations	5898	5898	5898
R^2	0.584	0.613	0.642

Panel B: 2008-2009

	(1)	(2)	(3)
$\text{TopQuartile}_{2008} \times \text{Credit Push}_t$	0.075***	0.070***	0.068***
	(0.000)	(0.000)	(0.000)
$\text{TopQuartile}_{2008}$	-0.062***	-0.058***	-0.056***
	(0.000)	(0.000)	(0.000)
Credit Push_t	0.057***	0.063***	0.037
	(0.000)	(0.000)	(0.107)
Firm's Controls	Yes	Yes	Yes
Industry FE	No	Yes	No
Industry × Year FE	No	No	Yes
Observations	3007	3007	3007
R^2	0.606	0.638	0.641

Note: The sample covers both the 2007-2010 (in Panel A) and 2008-2009 (in Panel B) periods and estimates equation 4 with Market Leverage as the dependent variable. Credit Push_t denotes whether $t \geq 2009$. $\text{TopQuartile}_{2008}$ represents a dummy for the firms belonging to the top quartile of the executive ownership level in 2008. The controls are same as in Table A6. p-values are in parentheses. *, ** and *** indicate significance at 10%, 5% and 1% levels. Standard errors are clustered at the firm level.

Table A8. Executive Ownership Quartiles and Market Leverage

Panel A: 2007-2010

	(1)	(2)	(3)
$ExQuartile3_{2008} \times Credit\ Push_t$	-0.023**	-0.024**	-0.026**
	(0.038)	(0.025)	(0.011)
$ExQuartile2_{2008} \times Credit\ Push_t$	-0.022**	-0.021**	-0.027***
	(0.030)	(0.037)	(0.006)
$ExQuartile1_{2008} \times Credit\ Push_t$	-0.035***	-0.032***	-0.037***
	(0.001)	(0.002)	(0.000)
$Credit\ Push_t$	0.004	0.000	0.084
	(0.675)	(0.982)	(0.163)
Firm's Controls	Yes	Yes	Yes
Ownership Quartile Control	Yes	Yes	Yes
Industry FE	No	Yes	No
Industry × Year FE	No	No	Yes
Observations	2933	2933	2933
R^2	0.595	0.637	0.674

Panel B: 2008-2009

	(1)	(2)	(3)
$ExQuartile3_{2008} \times Credit\ Push_t$	-0.060***	-0.060***	-0.054***
	(0.000)	(0.000)	(0.000)
$ExQuartile2_{2008} \times Credit\ Push_t$	-0.096***	-0.092***	-0.083***
	(0.000)	(0.000)	(0.000)
$ExQuartile1_{2008} \times Credit\ Push_t$	-0.112***	-0.108***	-0.102***
	(0.000)	(0.000)	(0.000)
$Credit\ Push_t$	0.035**	0.022	0.135***
	(0.013)	(0.100)	(0.000)
Firm's Controls	Yes	Yes	Yes
Ownership Quartile Control	Yes	Yes	Yes
Industry FE	No	Yes	No
Industry × Year FE	No	No	Yes
Observations	1501	1501	1501
R^2	0.631	0.676	0.679

Note: This table estimates equation 5 with Market Leverage as the dependent variable. The sample covers only non-zero executive ownership firms for the sample periods 2007-2010 in Panel A and 2008-2009 in Panel B. $Credit\ Push_t$ denotes whether $t \geq 2009$. ExQuartile variables are dummies representing the non-zero executive ownership firms belonging to the four quartiles of executive ownership levels in 2008. ExQuartile4 is used as the reference category. The controls are same as in Table A6. p-values are in parentheses. *, ** and *** indicate significance at 10%, 5% and 1% levels. Standard errors are clustered at the firm level.

Table A9. Executive Ownership and Market Leverage, 2006-2012.

	(1)	(2)	(3)
Executive Ownership$_{i,2006}$ × Year$_{2006}$	-0.022	-0.005	-0.047
	(0.739)	(0.929)	(0.454)
Executive Ownership$_{i,2007}$ × Year$_{2007}$	0.429***	0.408***	0.378***
	(0.000)	(0.000)	(0.000)
Executive Ownership$_{i,2009}$ × Year$_{2009}$	0.340***	0.322***	0.306***
	(0.000)	(0.000)	(0.000)
Executive Ownership$_{i,2010}$ × Year$_{2010}$	0.320***	0.294***	0.289***
	(0.000)	(0.000)	(0.000)
Executive Ownership$_{i,2011}$ × Year$_{2011}$	0.062	0.043	0.069
	(0.261)	(0.418)	(0.161)
Executive Ownership$_{i,2012}$ × Year$_{2012}$	0.058	0.047	0.079*
	(0.236)	(0.295)	(0.089)
Executive Ownership$_{it}$	-0.266***	-0.224***	-0.222***
	(0.000)	(0.000)	(0.000)
Firm's Controls	Yes	Yes	Yes
Year FE	Yes	Yes	Yes
Industry FE	No	Yes	No
Industry × Year FE	No	No	Yes
Observations	10221	10221	10221
R^2	0.597	0.631	0.644

Note: This table estimates equation 6. The sample covers 2006-2012 with Market Leverage as the dependent variable. Executive Ownership$_{it}$ is the number of shares owned by the executives divided by shares outstanding. Year$_t$ variable represents dummies for the years 2006, 2007, 2009, 2010, 2011 and 2012, with 2008 taken as the base year. The remaining controls are same as in Table A6. p-values are in parentheses. *, ** and *** indicate significance at 10%, 5% and 1% levels. Standard errors are clustered at the firm level.

Table A10. Executive Ownership and Market Leverage: Controlling Bank-Firm Relations.

Panel A: 2007-2010

	(1)	(2)	(3)
Executive Ownership$_{it}$ × Credit Push$_t$	0.053	0.059	0.074
	(0.304)	(0.251)	(0.130)
Executive Ownership$_{it}$	-0.073	-0.055	-0.083*
	(0.152)	(0.277)	(0.083)
Credit Push$_t$	-0.025***	-0.026***	0.020
	(0.000)	(0.000)	(0.587)
Prior Bank-Borrower Relationship	Yes	Yes	Yes
Firm's Controls	Yes	Yes	Yes
Industry FE	No	Yes	No
Industry × Year FE	No	No	Yes
Observations	2473	2473	2473
R^2	0.633	0.657	0.691

Panel B: 2008-2009

	(1)	(2)	(3)
Executive Ownership$_{it}$ × Credit Push$_t$	0.322***	0.315***	0.301***
	(0.000)	(0.001)	(0.000)
Executive Ownership$_{it}$	-0.246***	-0.227***	-0.218***
	(0.000)	(0.000)	(0.000)
Credit Push$_t$	-0.058***	-0.065***	-0.019
	(0.000)	(0.000)	(0.534)
Prior Bank-Borrower Relationship	Yes	Yes	Yes
Firm's Controls	Yes	Yes	Yes
Industry FE	No	Yes	No
Industry × Year FE	No	No	Yes
Observations	1256	1256	1256
R^2	0.656	0.682	0.684

Note: This table estimates equation 7 with Market Leverage as the dependent variable and reports the estimation of the benchmark model controlling for the prior bank-borrower relationship for both the 2007-2010 (in Panel A) and 2008-2009 (in Panel B) periods. Executive Ownership$_{it}$ is the number of shares owned by the executives divided by shares outstanding. Credit Push$_t$ denotes whether t $\geq$ 2009. The prior-bank-borrower relationship is an indicator variable that equals to one if firm i has borrowed from bank b at least once during the 2006-2008 period (i.e. pre-credit push period). We create this variable for the top 20 commercial banks, the 3 policy banks and a single "Other" category for all the remaining banks using the CSMAR-Bank Loans of Chinese Listed Companies (CSMAR-BLCLC) dataset. The controls are same as in Table A6. p-values are in parentheses. *, ** and *** indicate significance at the 10%, 5% and 1% level. Standard errors are clustered at the firm level.

Table A11. Comparison of Top Quartile Firms and Matched Sample

	Pre Matching			Post Matching		
Variable	Treated	Control	t-stat	Treated	Control	t-stat
ROA (net)	0.04	0.07	-6.42***	0.07	0.07	0.10
Firm Size	21.06	20.88	2.03***	20.89	20.93	-0.42
Market Book	1.12	1.42	-5.05***	1.33	1.25	0.89
Stock Holding Concentration	0.19	0.14	6.50***	0.14	0.14	-0.25
Institution Ownership	0.07	0.07	-0.35	0.06	0.06	0.02
SOE	0.63	0.33	10.33***	0.41	0.37	0.92
Positive Net Profit	0.83	0.91	-3.74***	0.89	0.89	-0.26
Foreign Shareholding	0.07	0.07	0.30	0.08	0.07	0.63
Dividend	0.49	0.64	-5.33***	0.59	0.60	-0.33
Bank Holding	0.04	0.01	2.53***	0.02	0.02	0.00
Asset Tangibility	0.29	0.25	3.88***	0.25	0.25	-0.46
CEO Turnover	0.21	0.14	2.97***	0.13	0.15	-0.82
CEO Chairman	0.89	0.74	7.14***	0.77	0.80	-0.89
Compensation Committee	0.83	0.74	3.69***	0.80	0.79	0.40
Board Size	9.31	8.99	2.84***	8.86	9.02	-1.08
Board Independence	0.36	0.36	0.49	0.36	0.36	-0.34
Observations	375	1135		303	303	

Note: "Treated" represents Top Quartile firms (i.e. firms in the fourth quartile) while "Control" represents: a) remaining firms in the "Pre Credit Shock" scenario and b) the matched sample in the "Post Credit Shock" scenario. *, ** and *** indicate significance at the 10%, 5% and 1% level. The variables are defined in the Appendix.

Table A12. Executive Ownership and Market Leverage: Propensity Score Matching

Panel A: 2007-2010

	(1)	(2)	(3)
$\text{TopQuartile}_{2008} \times \text{Credit Push}_t$	0.017***	0.015***	0.015***
	(0.004)	(0.008)	(0.008)
$\text{TopQuartile}_{2008}$	-0.017**	-0.020***	-0.020***
	(0.019)	(0.005)	(0.004)
Credit Push_t	-0.033***	-0.034***	-0.059***
	(0.000)	(0.000)	(0.000)
Firm's Controls	Yes	Yes	Yes
Industry FE	No	Yes	No
Industry × Year FE	No	No	Yes
Observations	2407	2407	2407
R^2	0.614	0.642	0.675

Panel B: 2008-2009

	(1)	(2)	(3)
$\text{TopQuartile}_{2008} \times \text{Credit Push}_t$	0.019**	0.018**	0.019**
	(0.031)	(0.035)	(0.023)
$\text{TopQuartile}_{2008}$	-0.020*	-0.020**	-0.020**
	(0.055)	(0.046)	(0.040)
Credit Push_t	-0.058***	-0.066***	-0.021
	(0.000)	(0.000)	(0.329)
Firm's Controls	Yes	Yes	Yes
Industry FE	No	Yes	No
Industry × Year FE	No	No	Yes
Observations	1204	1204	1204
R^2	0.627	0.658	0.665

Note: This table estimates equation 8 with Market Leverage as the dependent variable for both the 2007-2010 (in Panel A) and 2008-2009 (in Panel B) periods using the 303 firm pairs created on the basis of propensity scores on the 2008 values of the control variables using the nearest neighbor approach. Variables are defined in the Appendix. All 16 firm characteristic variables in Table A11 have been used as controls to calculate the propensity scores. p-values are in parentheses. *, ** and *** indicate significance at the 10%, 5% and 1% level. Standard errors are clustered at the firm level.

Table A13. Executive Ownership and Book Leverage with Year FE, 2007-2010

	(1)	(2)	(3)
Executive Ownership$_{it}$ × Credit Push$_t$	0.152***	0.139***	0.139***
	(0.000)	(0.001)	(0.001)
Executive Ownership$_{it}$	-0.224***	-0.184***	-0.183***
	(0.000)	(0.000)	(0.000)
Firm's Controls	Yes	Yes	Yes
Year FE	Yes	Yes	Yes
Industry FE	No	Yes	No
Industry × Year FE	No	No	Yes
Observations	5898	5898	5898
R^2	0.327	0.361	0.364

Note: This table estimates the benchmark equation with year fixed effects as given in equation 9. The sample covers the 2007-2010 period with Book Leverage as the dependent variable. Executive Ownership$_{it}$ is the number of shares owned by the executives divided by shares outstanding. CreditPush$_t$ is a dummy that takes the value of 1 if year $\geq$ 2009 and zero otherwise. Controls are: ROA, firm size, market-to-book ratio, assets tangibility, dividend, positive net profit, SOE, ownership concentration, institutional ownership, bank holding and foreign holding. p-values are in parentheses. *, ** and *** indicate significance at 10%, 5% and 1% levels. Standard errors are clustered at the firm level.

Table A14. Executive Ownership and Market Leverage with Year FE, 2007-2010

	(1)	(2)	(3)
Executive Ownership$_{it}$ × Credit Push$_t$	0.141***	0.131***	0.137***
	(0.000)	(0.000)	(0.000)
Executive Ownership$_{it}$	-0.141***	-0.115***	-0.116***
	(0.001)	(0.003)	(0.003)
Firm's Controls	Yes	Yes	Yes
Year FE	Yes	Yes	Yes
Industry FE	No	Yes	No
Industry × Year FE	No	No	Yes
Observations	5898	5898	5898
R^2	0.601	0.633	0.642

Note: This table estimates the benchmark equation with year fixed effects as given in equation 9. The sample covers the 2007-2010 period with Market Leverage as the dependent variable. Executive Ownership$_{it}$ is the number of shares owned by the executives divided by shares outstanding. CreditPush$_t$ is a dummy that takes the value of 1 if year $\geq$ 2009 and zero otherwise. Controls are: ROA, firm size, market-to-book ratio, assets tangibility, dividend, positive net profit, SOE, ownership concentration, institutional ownership, bank holding and foreign holding. p-values are in parentheses. *, ** and *** indicate significance at 10%, 5% and 1% levels. Standard errors are clustered at the firm level.

Table A15. Executive Ownership and Book Leverage: Placebo Test

Panel A: 2011-2014

	(1)	(2)	(3)
Executive Ownership$_{it}$ × Post2012	0.058	0.061	0.060
	(0.290)	(0.243)	(0.263)
Executive Ownership$_{it}$	-0.168**	-0.125**	-0.124*
	(0.013)	(0.047)	(0.052)
Post2012	-0.006*	-0.007**	0.117**
	(0.086)	(0.027)	(0.014)
Firm's Controls	Yes	Yes	Yes
Industry FE	No	Yes	No
Industry × Year FE	No	No	Yes
Observations	5994	5994	5994
R^2	0.311	0.368	0.369

Panel B: 2011-2012

	(1)	(2)	(3)
Executive Ownership$_{it}$ × Post2012	0.015	0.025	0.031
	(0.766)	(0.602)	(0.527)
Executive Ownership$_{it}$	-0.156**	-0.119**	-0.122*
	(0.022)	(0.063)	(0.057)
Post2012	0.007**	0.007**	0.078
	(0.015)	(0.021)	(0.106)
Firm's Controls	Yes	Yes	Yes
Industry FE	No	Yes	No
Industry × Year FE	No	No	Yes
Observations	3001	3001	3001
R^2	0.322	0.377	0.377

Note: The sample covers 2011-2014 in Panel A and 2011-2012 in Panel B to estimate equation 3 with Book Leverage as the dependent variable. The sample uses only the publicly listed firms that are non directly controlled by the Chinese government. Executive Ownership$_{it}$ is the number of shares owned by the executives divided by shares outstanding. Credit Push$_t$ denotes whether t $\geq$ 2009. The controls are same as in Table A6. p-values are in parentheses. *, ** and *** indicate significance at 10%, 5% and 1% levels. Standard errors are clustered at the firm level.

Table A16. Executive Ownership and Market Leverage: Placebo Test

Panel A: 2011-2014

	(1)	(2)	(3)
Executive Ownership$_{it}$ × Post2012	0.047	0.049	0.046
	(0.299)	(0.244)	(0.284)
Executive Ownership$_{it}$	-0.145**	-0.090*	-0.090*
	(0.011)	(0.076)	(0.073)
Post2012	-0.008***	-0.010***	-0.112***
	(0.001)	(0.000)	(0.005)
Firm's Controls	Yes	Yes	Yes
Industry FE	No	Yes	No
Industry × Year FE	No	No	Yes
Observations	5994	5994	5994
R^2	0.575	0.643	0.650

Panel B: 2011-2012

	(1)	(2)	(3)
Executive Ownership$_{it}$ × Post2012	0.005	0.021	0.019
	(0.913)	(0.622)	(0.659)
Executive Ownership$_{it}$	-0.132**	-0.091*	-0.090*
	(0.028)	(0.087)	(0.084)
Post2012	0.000	0.000	-0.121***
	(0.804)	(0.950)	(0.000)
Firm's Controls	Yes	Yes	Yes
Industry FE	No	Yes	No
Industry × Year FE	No	No	Yes
Observations	3001	3001	3001
R^2	0.590	0.657	0.657

Note: The sample covers 2011-2014 in Panel A and 2011-2012 in Panel B to estimate equation 3 with Market Leverage as the dependent variable. The sample uses only the publicly listed firms that are non directly controlled by the Chinese government. Executive Ownership$_{it}$ is the number of shares owned by the executives divided by shares outstanding. Credit Push$_t$ denotes whether t $\geq$ 2009. The controls are same as in Table A6. p-values are in parentheses. *, ** and *** indicate significance at 10%, 5% and 1% levels. Standard errors are clustered at the firm level.

Table A17. Executive Ownership and Book Leverage: Firm Fixed Effects

Panel A: 2007-2010

	(1)	(2)	(3)
Executive Ownership$_{it}$ × Credit Push$_t$	0.049	0.043	0.045
	(0.140)	(0.170)	(0.151)
Executive Ownership$_{it}$	0.022	0.042	0.033
	(0.623)	(0.353)	(0.470)
Credit Push$_t$	0.016**	0.009***	0.005
	(0.000)	(0.002)	(0.852)
Firm's Controls	No	Yes	Yes
Firm FE	Yes	Yes	Yes
Industry × Year FE	No	No	Yes
Observations	5898	5898	5898
R^2	0.018	0.123	0.146

Panel B: 2008-2009

	(1)	(2)	(3)
Executive Ownership$_{it}$ × Credit Push$_t$	0.063**	0.062**	0.065**
	(0.039)	(0.042)	(0.035)
Executive Ownership$_{it}$	0.026	0.052	0.052
	(0.751)	(0.476)	(0.477)
Credit Push$_t$	0.010***	0.016***	0.020
	(0.000)	(0.000)	(0.237)
Firm's Controls	No	Yes	Yes
Firm FE	Yes	Yes	Yes
Industry × Year FE	No	No	Yes
Observations	3007	3007	3007
R^2	0.021	0.149	0.156

Note: This equation estimates equation 3 with Firm Fixed Effects and Book Leverage as the dependent variable. The sample covers 2007-2010 in Panel A and 2008-2009 in Panel B. Executive Ownership$_{it}$ is the number of shares owned by the executives divided by shares outstanding. CreditPush$_t$ is a dummy that takes the value of 1 if year $\geq$ 2009 and zero otherwise. The remaining controls are same as in Table A6. p-values are in parentheses. *, ** and *** indicate significance at 10%, 5% and 1% levels. Standard errors are clustered at the firm level.

Table A18. Executive Ownership and Market Leverage: Firm Fixed Effects

Panel A: 2007-2010

	(1)	(2)	(3)
Executive Ownership$_{it}$ × Credit Push$_t$	0.019	0.094***	0.108***
	(0.371)	(0.001)	(0.000)
Executive Ownership$_{it}$	0.007	-0.003	0.005
	(0.822)	(0.945)	(0.870)
Credit Push$_t$	-0.030***	-0.027***	-0.017
	(0.000)	(0.000)	(0.101)
Firm's Controls	No	Yes	Yes
Firm FE	Yes	Yes	Yes
Industry × Year FE	No	No	Yes
Observations	5898	5898	5898
R^2	0.026	0.425	0.628

Panel B: 2008-2009

	(1)	(2)	(3)
Executive Ownership$_{it}$ × Credit Push$_t$	0.220***	0.210***	0.209***
	(0.000)	(0.000)	(0.000)
Executive Ownership$_{it}$	-0.130**	-0.104**	-0.096**
	(0.011)	(0.025)	(0.046)
Credit Push$_t$	-0.128***	-0.124***	-0.074***
	(0.000)	(0.000)	(0.000)
Firm's Controls	No	Yes	Yes
Firm FE	Yes	Yes	Yes
Industry × Year FE	No	No	Yes
Observations	3007	3007	3007
R^2	0.664	0.696	0.703

Note: This equation estimates equation 3 with Firm Fixed Effects and Market Leverage as the dependent variable. The sample covers 2007-2010 in Panel A and 2008-2009 in Panel B. Executive Ownership$_{it}$ is the number of shares owned by the executives divided by shares outstanding. CreditPush$_t$ is a dummy that takes the value of 1 if year $\geq$ 2009 and zero otherwise. The remaining controls are same as in Table A6. p-values are in parentheses. *, ** and *** indicate significance at 10%, 5% and 1% levels. Standard errors are clustered at the firm level.

Table A19. Executive Ownership and Book Leverage: Non-SOE Sample

Panel A: 2007-2010

	(1)	(2)	(3)
Executive Ownership$_{it}$ × Credit Push$_t$	0.176***	0.165***	0.154***
	(0.000)	(0.000)	(0.001)
Executive Ownership$_{it}$	-0.286***	-0.240***	-0.214***
	(0.000)	(0.000)	(0.000)
Credit Push$_t$	0.002	0.000	0.007
	(0.697)	(0.940)	(0.911)
Firm's Controls	Yes	Yes	Yes
Industry FE	No	Yes	No
Industry × Year FE	No	No	Yes
Observations	2846	2846	2846
R^2	0.312	0.348	0.371

Panel B: 2008-2009

	(1)	(2)	(3)
Executive Ownership$_{it}$ × Credit Push$_t$	0.167***	0.158***	0.157***
	(0.000)	(0.001)	(0.002)
Executive Ownership$_{it}$	-0.224***	-0.183***	-0.182***
	(0.000)	(0.002)	(0.003)
Credit Push$_t$	0.057***	0.051***	0.095**
	(0.000)	(0.000)	(0.040)
Firm's Controls	Yes	Yes	Yes
Industry FE	No	Yes	No
Industry × Year FE	No	No	Yes
Observations	1469	1469	1469
R^2	0.372	0.405	0.406

Note: The sample covers 2007-2010 in Panel A and 2008-2009 in Panel B to estimate equation 3 with Book Leverage as the dependent variable. This table provides results for the estimation of equation 3 and uses only the publicly listed firms that are non directly controlled by the Chinese government. Executive Ownership$_{it}$ is the number of shares owned by the executives divided by shares outstanding. Credit Push$_t$ denotes whether t $\geq$ 2009. The controls are same as in Table A6. p-values are in parentheses. *, ** and *** indicate significance at 10%, 5% and 1% levels. Standard errors are clustered at the firm level.

Table A20. Executive Ownership and Market Leverage: Non-SOE Sample

Panel A: 2007-2010

	(1)	(2)	(3)
Executive Ownership$_{it}$ × Credit Push$_t$	0.124***	0.114***	0.127***
	(0.000)	(0.000)	(0.000)
Executive Ownership$_{it}$	-0.161***	-0.122**	-0.140***
	(0.000)	(0.000)	(0.000)
Credit Push$_t$	-0.025***	-0.027***	-0.031
	(0.000)	(0.000)	(0.391)
Firm's Controls	Yes	Yes	Yes
Industry FE	No	Yes	No
Industry × Year FE	No	No	Yes
Observations	2846	2846	2846
R^2	0.579	0.609	0.638

Panel B: 2008-2009

	(1)	(2)	(3)
Executive Ownership$_{it}$ × Credit Push$_t$	0.283***	0.267***	0.240***
	(0.000)	(0.000)	(0.000)
Executive Ownership$_{it}$	-0.266***	-0.225***	-0.209***
	(0.000)	(0.000)	(0.000)
Credit Push$_t$	-0.049***	-0.057***	-0.036
	(0.000)	(0.000)	(0.168)
Firm's Controls	Yes	Yes	Yes
Industry FE	No	Yes	No
Industry × Year FE	No	No	Yes
Observations	1469	1469	1469
R^2	0.597	0.629	0.634

Note: The sample covers both the 2007-2010 (in Panel A) and 2008-2009 (in Panel B) periods to estimate equation 3 with Market Leverage as the dependent variable. This table provides results for the estimation of equation 3 and uses only the publicly listed firms that are non directly controlled by the Chinese government. Executive Ownership$_{it}$ is the number of shares owned by the executives divided by shares outstanding. Credit Push$_t$ denotes whether t $\geq$ 2009. The controls are same as in Table A6. p-values are in parentheses. *, ** and *** indicate significance at 10%, 5% and 1% levels. Standard errors are clustered at the firm level.

Table A21. Executive Ownership and Book Leverage Without Infrastructure Firms

Panel A: 2007-2010

	(1)	(2)	(3)
Executive Ownership$_{it}$ × Credit Push$_t$	0.172***	0.157***	0.150***
	(0.000)	(0.001)	(0.001)
Executive Ownership$_{it}$	-0.257***	-0.212***	-0.189***
	(0.000)	(0.000)	(0.000)
Credit Push$_t$	0.009**	0.008**	0.050
	(0.011)	(0.016)	(0.282)
Firm's Controls	Yes	Yes	Yes
Industry FE	No	Yes	No
Industry × Year FE	No	No	Yes
Observations	5025	5025	5025
R^2	0.291	0.312	0.330

Panel B: 2008-2009

	(1)	(2)	(3)
Executive Ownership$_{it}$ × Credit Push$_t$	0.206***	0.188***	0.199***
	(0.000)	(0.000)	(0.000)
Executive Ownership$_{it}$	-0.219***	-0.177***	-0.182***
	(0.000)	(0.004)	(0.003)
Credit Push$_t$	0.063***	0.058***	0.120***
	(0.000)	(0.000)	(0.003)
Firm's Controls	Yes	Yes	Yes
Industry FE	No	Yes	No
Industry × Year FE	No	No	Yes
Observations	2563	2563	2563
R^2	0.339	0.357	0.358

Note: This table estimates equation 3 with Book Leverage as the dependent variable but without the infrastructure firms. The sample covers both the 2007-2010 (in Panel A) and 2008-2009 (in Panel B) periods. Executive Ownership$_{it}$ is the number of shares owned by the executives divided by shares outstanding. CreditPush$_t$ is a dummy that takes the value of 1 if year $\geq$ 2009 and zero otherwise. The remaining controls are same as in Table A6. p-values are in parentheses. *, ** and *** indicate significance at 10%, 5% and 1% levels. Standard errors are clustered at the firm level.

Table A22. Executive Ownership and Market Leverage Without Infrastructure Firms

Panel A: 2007-2010

	(1)	(2)	(3)
Executive Ownership$_{it}$ × Credit Push$_t$	0.137***	0.125***	0.141***
	(0.000)	(0.001)	(0.000)
Executive Ownership$_{it}$	-0.156***	-0.127***	-0.153***
	(0.000)	(0.000)	(0.000)
Credit Push$_t$	-0.025***	-0.026***	-0.055*
	(0.000)	(0.000)	(0.085)
Firm's Controls	Yes	Yes	Yes
Industry FE	No	Yes	No
Industry × Year FE	No	No	Yes
Observations	5025	5025	5025
R^2	0.588	0.602	0.628

Panel B: 2008-2009

	(1)	(2)	(3)
Executive Ownership$_{it}$ × Credit Push$_t$	0.350***	0.333***	0.337***
	(0.000)	(0.000)	(0.000)
Executive Ownership$_{it}$	-0.290***	-0.264***	-0.264***
	(0.000)	(0.000)	(0.000)
Credit Push$_t$	-0.053***	-0.058***	0.037
	(0.000)	(0.000)	(0.110)
Firm's Controls	Yes	Yes	Yes
Industry FE	No	Yes	No
Industry × Year FE	No	No	Yes
Observations	2563	2563	2563
R^2	0.602	0.618	0.620

Note: This table estimates equation 3 with Market Leverage as the dependent variable but without the infrastructure firms. The sample covers both the 2007-2010 (in Panel A) and 2008-2009 (in Panel B) periods. Executive Ownership$_{it}$ is the number of shares owned by the executives divided by shares outstanding. CreditPush$_t$ is a dummy that takes the value of 1 if year $\geq$ 2009 and zero otherwise. The remaining controls are same as in Table A6. p-values are in parentheses. *, ** and *** indicate significance at 10%, 5% and 1% levels. Standard errors are clustered at the firm level.

Table A23. Executive Ownership and Log of Debt After the Credit Push

Panel A: 2007-2010

	(1)	(2)	(3)
Executive Ownership$_{it}$ × Credit Push$_t$	0.703***	0.593***	0.570***
	(0.000)	(0.001)	(0.002)
Executive Ownership$_{it}$	-1.882***	-1.429***	-1.317***
	(0.000)	(0.000)	(0.000)
Credit Push$_t$	0.184***	0.155***	0.386**
	(0.000)	(0.000)	(0.046)
Firm's Controls	Yes	Yes	Yes
Industry FE	No	Yes	No
Industry × Year FE	No	No	Yes
Observations	5898	5898	5898
R^2	0.752	0.802	0.808

Panel B: 2008-2009

	(1)	(2)	(3)
Executive Ownership$_{it}$ × Credit Push$_t$	1.017***	0.876***	0.866***
	(0.000)	(0.000)	(0.000)
Executive Ownership$_{it}$	-1.864***	-1.433***	-1.426***
	(0.000)	(0.000)	(0.000)
Credit Push$_t$	0.455***	0.372***	0.663***
	(0.000)	(0.000)	(0.000)
Firm's Controls	Yes	Yes	Yes
Industry FE	No	Yes	No
Industry × Year FE	No	No	Yes
Observations	3007	3007	3007
R^2	0.758	0.808	0.809

Note: This table estimates equation 10 for the periods 2007-2010 (in Panel A) and 2008-2009 (in Panel B). ExecutiveOwnership$_{it}$ is the number of shares owned by the executives divided by shares outstanding. CreditPush$_t$ is a dummy that takes the value of 1 if year $\geq$ 2009 and zero otherwise. The remaining controls are same as in Table A6. p-values are in parentheses. *, ** and *** indicate significance at 10%, 5% and 1% levels. Standard errors are clustered at the firm level.

Table A24. Executive Ownership and Book Leverage: Ownership at 2008 level

Panel A: 2007-2010

	(1)	(2)	(3)
Executive Ownership$_{i,2008}$ × Credit Push$_t$	0.139***	0.124***	0.110***
	(0.000)	(0.001)	(0.002)
Executive Ownership$_{i,2008}$	-0.285***	-0.237***	-0.206***
	(0.000)	(0.001)	(0.000)
Credit Push$_t$	0.011***	0.010***	0.050
	(0.001)	(0.002)	(0.293)
Firm's Controls	Yes	Yes	Yes
Industry FE	No	Yes	No
Industry × Year FE	No	No	Yes
Observations	5897	5897	5897
R^2	0.311	0.349	0.365

Panel B: 2008-2009

	(1)	(2)	(3)
Executive Ownership$_{i,2008}$ × Credit Push$_t$	0.159***	0.142***	0.143***
	(0.000)	(0.000)	(0.000)
Executive Ownership$_{i,2008}$	-0.233***	-0.189***	-0.189***
	(0.000)	(0.001)	(0.001)
Credit Push$_t$	0.062***	0.055***	0.120***
	(0.002)	(0.003)	(0.003)
Firm's Controls	Yes	Yes	Yes
Industry FE	No	Yes	No
Industry × Year FE	No	No	Yes
Observations	3007	3007	3007
R^2	0.355	0.392	0.393

Note: The table estimates equation 3 with ownership structure fixed at 2008 level with Book Leverage as the dependent variable. The sample covers 2007-2010 in Panel A and 2008-2009 in Panel B. Executive Ownership$_{i,2008}$ is the number of shares owned by the executives divided by shares outstanding in 2008. Credit Push$_t$ denotes whether t $\geq$ 2009. The controls are same as in Table A6. p-values are in parentheses. *, ** and *** indicate significance at 10%, 5% and 1% levels. Standard errors are clustered at the firm level.

Table A25. Executive Ownership and Market Leverage: Ownership at 2008 level

Panel A: 2007-2010

	(1)	(2)	(3)
Executive Ownership$_{i,2008}$ × Credit Push$_t$	0.135***	0.127***	0.143***
	(0.000)	(0.000)	(0.000)
Executive Ownership$_{i,2008}$	-0.146***	-0.119**	-0.149***
	(0.000)	(0.002)	(0.000)
Credit Push$_t$	-0.022***	-0.024***	-0.052
	(0.000)	(0.000)	(0.105)
Firm's Controls	Yes	Yes	Yes
Industry FE	No	Yes	No
Industry × Year FE	No	No	Yes
Observations	5897	5897	5897
R^2	0.585	0.613	0.642

Panel B: 2008-2009

	(1)	(2)	(3)
Executive Ownership$_{i,2008}$ × Credit Push$_t$	0.341***	0.326***	0.310***
	(0.000)	(0.000)	(0.000)
Executive Ownership$_{i,2008}$	-0.267***	-0.240**	-0.231***
	(0.000)	(0.000)	(0.000)
Credit Push$_t$	-0.051***	-0.058***	-0.038*
	(0.000)	(0.000)	(0.099)
Firm's Controls	Yes	Yes	Yes
Industry FE	No	Yes	No
Industry × Year FE	No	No	Yes
Observations	3007	3007	3007
R^2	0.604	0.636	0.639

Note: The table estimates equation 3 with ownership structure fixed at 2008 level with Market Leverage as the dependent variable. The sample covers 2007-2010 in Panel A and 2008-2009 in Panel B. Executive Ownership$_{i,2008}$ is the number of shares owned by the executives divided by shares outstanding in 2008. Credit Push$_t$ denotes whether t $\geq$ 2009. The controls are same as in Table A6. p-values are in parentheses. *, ** and *** indicate significance at 10%, 5% and 1% levels. Standard errors are clustered at the firm level.

Table A26. Executive Ownership and Book Leverage: Equity-to-Salary Ratio in 2008

Panel A: 2007-2010

	(1)	(2)	(3)
Equity-to-Salary$_{i,2008}$× Credit Push$_t$	0.0000489**	0.0000428**	0.0000332*
	(0.012)	(0.023)	(0.078)
Equity-to-Salary$_{i,2008}$	-0.000094***	-0.0000734***	-0.000055**
	(0.000)	(0.001)	(0.011)
Credit Push$_t$	0.0104***	0.00966***	0.0513
	(0.001)	(0.002)	(0.278)
Firm's Controls	Yes	Yes	Yes
Industry FE	No	Yes	No
Industry x Year FE	No	No	Yes
Observations	5833	5833	5833
R2	0.313	0.352	0.369

Panel B: 2008-2009

	(1)	(2)	(3)
Equity-to-Salary$_{i,2008}$× Credit Push$_t$	0.0000568***	0.0000501***	0.0000489**
	(0.004)	(0.008)	(0.011)
Equity-to-Salary$_{i,2008}$	-0.0000633***	-0.0000451**	-0.0000440*
	(0.007)	(0.048)	(0.055)
Credit Push$_t$	0.0628***	0.0564***	0.0124***
	(0.000)	(0.000)	(0.002)
Firm's Controls	Yes	Yes	Yes
Industry FE	No	Yes	No
Industry x Year FE	No	No	Yes
Observations	2980	2980	2980
R2	0.355	0.393	0.394

Note: This table reports the estimation of equation A4. This model specification uses Book Leverage as the dependent variable for the 2007-2010 sample period (Panel A) and for the 2008-2009 sample period (Panel B). The variables are defined in the Appendix. The controls and significance levels are same as in Table A6. p-values are in parentheses. Standard errors are clustered at the firm level.

Table A27. Executive Ownership and Market Leverage: Equity-to-Salary Ratio in 2008

Panel A: 2007-2010

	(1)	(2)	(3)
Equity-to-Salary$_{i,2008}$× Credit Push$_t$	0.0000447***	0.0000412***	0.0000501***
	(0.003)	(0.004)	(0.000)
Equity-to-Salary$_{i,2008}$	-0.0000475**	-0.0000345*	-0.0000513***
	(0.021)	(0.075)	(0.007)
Credit Push$_t$	-0.0216***	-0.0229***	0.0520
	(0.000)	(0.000)	(0.106)
Firm's Controls	Yes	Yes	Yes
Industry FE	No	Yes	No
Industry x Year FE	No	No	Yes
Observations	5833	5833	5833
R2	0.586	0.615	0.644

Panel B: 2008-2009

	(1)	(2)	(3)
Equity-to-Salary$_{i,2008}$× Credit Push$_t$	0.000135***	0.000130***	0.000122***
	(0.000)	(0.000)	(0.000)
Equity-to-Salary$_{i,2008}$	-0.0000992***	-0.0000879***	-0.0000834***
	(0.000)	(0.000)	(0.000)
Credit Push$_t$	-0.0489***	-0.0561***	-0.0395*
	(0.000)	(0.000)	(0.082)
Firm's Controls	Yes	Yes	Yes
Industry FE	No	Yes	No
Industry x Year FE	No	No	Yes
Observations	2980	2980	2980
R2	0.604	0.637	0.640

Note: This table reports the estimation of equation A4. This model specification uses Market Leverage as the dependent variable for the 2007-2010 sample period (Panel A) and for the 2008-2009 sample period (Panel B). The variables are defined in the Appendix. The controls and significance levels are same as in Table A6. p-values are in parentheses. Standard errors are clustered at the firm level.

Table A28. Executive Ownership and Firm Leverage, 2006-2012

Panel A: Book Leverage

	(1)	(2)	(3)
Executive Ownership$_{i,t}$ × Credit Push$_t$	0.108**	0.089**	0.089**
	(0.018)	(0.043)	(0.043)
Executive Ownership$_{i,t}$	-0.235***	-0.184***	-0.168***
	(0.000)	(0.000)	(0.001)
Credit Push$_t$	-0.005	-0.004	-0.091*
	(0.156)	(0.259)	(0.065)
Firm's Controls	Yes	Yes	Yes
Industry FE	No	Yes	No
Industry × Year FE	No	No	Yes
Observations	10221	10221	10221
R^2	0.303	0.344	0.361

Panel B: Market Leverage

	(1)	(2)	(3)
Executive Ownership$_{i,t}$ × Credit Push$_t$	0.052	0.039	0.058*
	(0.161)	(0.264)	(0.091)
Executive Ownership$_{i,t}$	-0.097**	-0.062	-0.083**
	(0.031)	(0.147)	(0.042)
Credit Push$_t$	-0.012***	-0.012***	-0.055
	(0.000)	(0.000)	(0.144)
Firm's Controls	Yes	Yes	Yes
Industry FE	No	Yes	No
Industry × Year FE	No	No	Yes
Observations	10221	10221	10221
R^2	0.583	0.615	0.641

Note: The sample covers 2006-2012 and estimates equation 3. Executive Ownership$_{it}$ is the number of shares owned by the executives divided by shares outstanding. Credit Push$_t$ denotes whether t $\geq$ 2009. The controls are same as in Table A6. p-values are in parentheses. *, ** and *** indicate significance at 10%, 5% and 1% levels. Standard errors are clustered at the firm level.

Online Appendix Figures

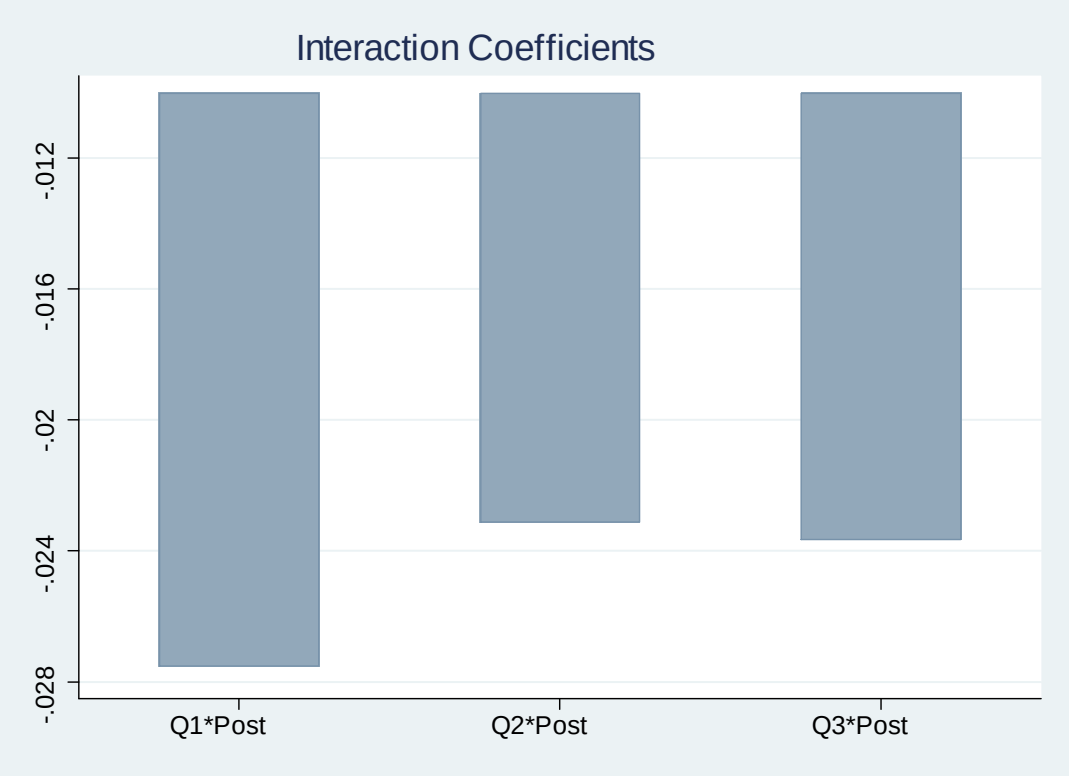

Figure A1. Interaction Between Executive Ownership Quartiles and Credit Shock with Book Leverage, 2007-2010. This figure illustrates the almost monotonous increase in the impact of the interaction term between different quartiles of executive ownership and credit shock on Book Leverage for the period 2007-2010.

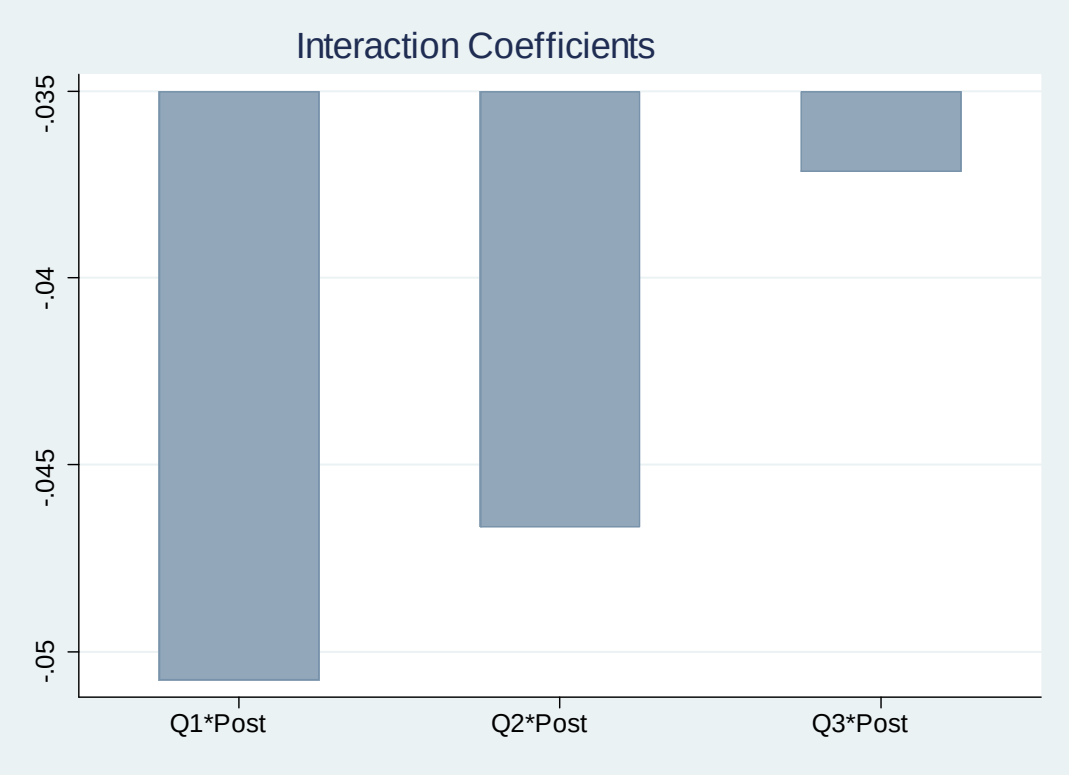

Figure A2. Interaction Between Executive Ownership Quartiles and Credit Shock with Book Leverage, 2008-2009. This figure illustrates the monotonous increase in the impact of the interaction term between different quartiles of executive ownership and credit shock on Book Leverage for the period 2008-2009.

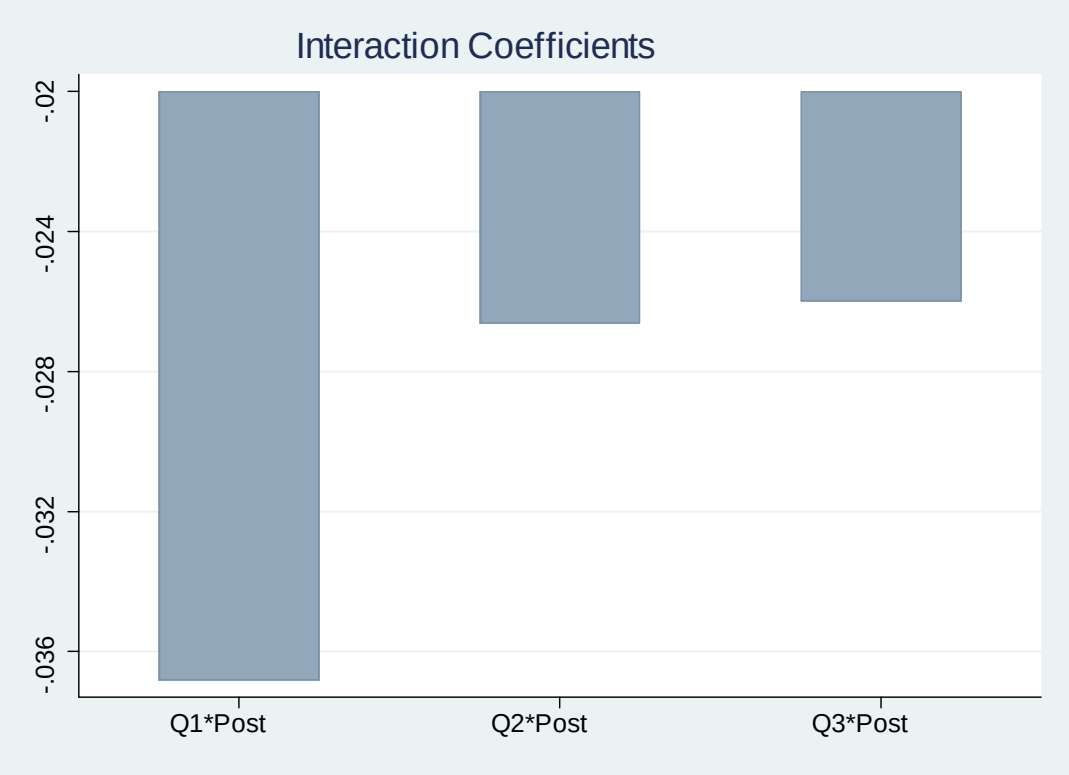

Figure A3. Interaction Between Executive Ownership Quartiles and Credit Shock with Market Leverage, 2007-2010. This figure illustrates the monotonous increase in the impact of the interaction term between different quartiles of executive ownership and credit shock on Market Leverage for the period 2007-2010.

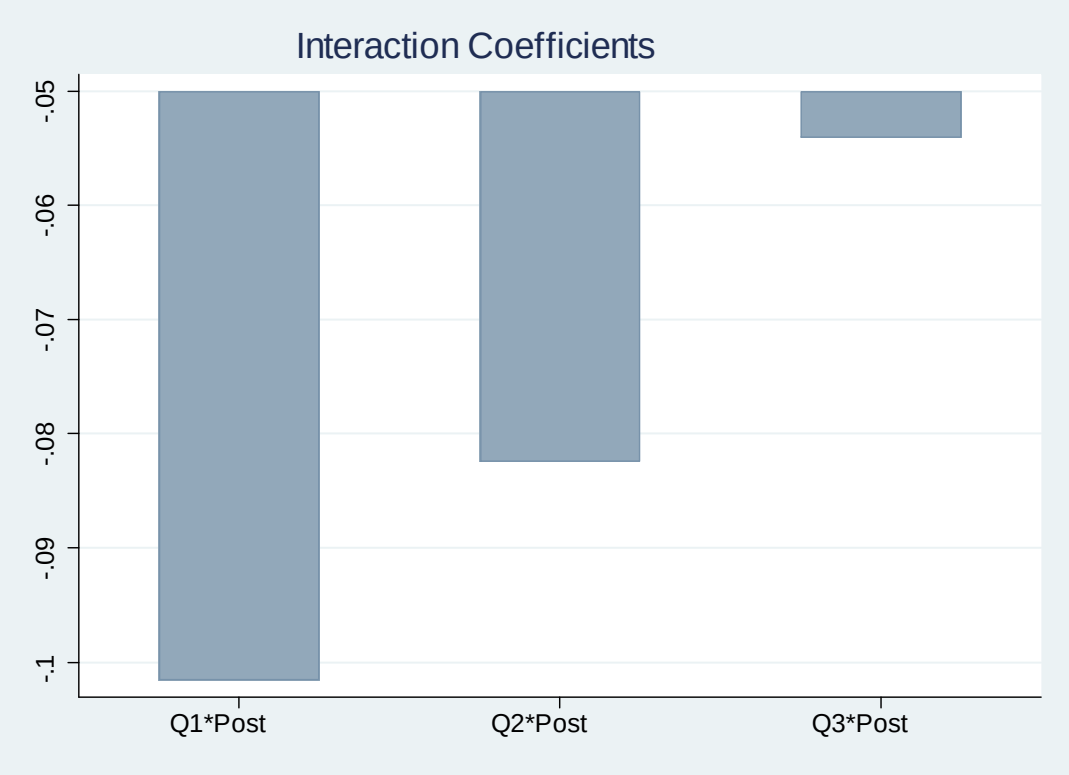

Figure A4. Interaction Between Executive Ownership Quartiles and Credit Shock with Market Leverage, 2008-2009. This figure illustrates the monotonous increase in the impact of the interaction term between different quartiles of executive ownership and credit shock on Market Leverage for the period 2008-2009.

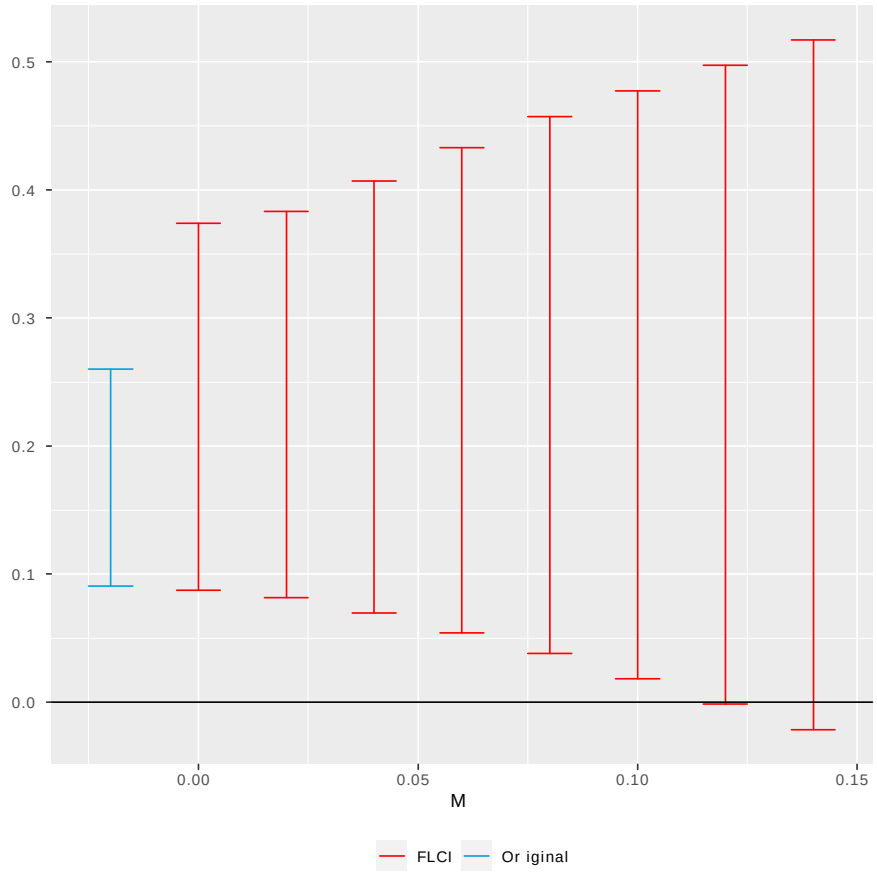

Figure A5: Sensitivity Analysis for Dynamic Regression with Book Leverage: This figure reports the sensitivity analysis to failures of the parallel lines assumption following Rambachan and Roth (2019). We check the coefficient of the interaction term between executive ownership and the 2009 year dummy with Book Leverage as the dependent variable. The sample period is 2006-2012. The x-axis is the values of the nonlinearity parameter (M) that captures the amount of deviation from parallel trends. The y-axis is the range of estimated coefficient values for the interaction coefficient. "FLCI" refers to the optimal fixed length confidence intervals for the interaction coefficient assuming $M > 0$. "Original" is the confidence interval for the interaction coefficient when $M = 0$ (i.e. the parallel trend assumption perfectly holds). Both FLCI and CI are using 95% confidence level.