

Online Appendix to
“The effects of removing barriers to equity issuance”

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1. Sample size and issuance activity over time

Table A1 presents descriptive statistics on the number of firms in our sample and the percentage of firms conducting public or private equity offerings for each year of our sample period. The number of firms in our sample decreases over our sample period. This decline in the number of small public firms is consistent with both Gao, Ritter, and Zhu (2013), who show that our sample period is characterized by few new firms going public, and Doidge, Karolyi, and Stulz (2016), who show that there has been a persistent trend toward fewer U.S. publicly listed firms.

There has also been a trend toward a higher percentage of firms conducting public equity offerings and a lower percentage of firms conducting PIPEs. Between 2002 and 2007 the percentage of firms conducting public equity offerings ranged from 2.93 to 8.78. At least 10.95 percent of firms have raised public equity in each year since 2009, with approximately 16% of firms raising public equity in 2009 and 2010. In contrast, the percentage of firms conducting PIPEs has fallen, from approximately 7% between 2002 and 2007 to less than 3% between 2009 and 2012.

2. Results including the financial crisis

The regulatory change we study was followed by a major financial crisis. In our main estimations, we exclude observations with a fiscal year end between June 2008 and December 2009 because we want to ensure that our findings are not driven by the atypical period surrounding the financial crisis, a period of low issuance and a time when there were substantial frictions to acquiring capital, even for good investments. The effect of the crisis is partially evident from the abnormal issuance behavior in 2008 and 2009. Specifically, Figure 1 shows a sharp reduction in issuance during 2008 followed by a sharp post-crisis recovery in 2009.

In Table A2, we report the results from our main tests but include the crisis period. While all coefficients remain similar and statistically significant, some of the effects are smaller in magnitude. In particular, we observe smaller increases in shelf issuances and investment. These effects are still economically large and statistically significant. We attribute the difference in results to the much lower overall levels of issuance and investment during a financial crisis. Because the treated and untreated groups tend to issue and invest similarly (and at a lower rate), the interaction term that tests for level differences between the two groups suffers from attenuation toward zero.

3. Within-firm variation

As discussed in Section 3.2 of the paper, in our main tests we use both within- and between-firm variations. As a robustness check, in Table A3, we provide tests that use only the time-series variation in firm outcomes. This alternative specification provides additional controls for non-observable time-invariant firm characteristics, but this comes at the high cost of ignoring a substantial part of the useful variation and therefore reduces the power of our tests. Because we restrict the sample to firms near the \$75 million public float threshold, the typical firm is in our sample for only three years.

Panel A of Table A3 replicates our primary issuance results but with the addition of firm fixed effects. Notably, the estimated effects on equity issuance in Table A3 and Table 3 are of the same magnitude, with the results in Columns 1 and 2 remaining statistically significant at the 5% level or better. However, as expected, the significance levels fall due to a power reduction. We find similar results in Panel B with respect to our investment results. The coefficients are comparable to their original levels (Table 7), but the significance levels drop.

Unlike issuance and investment, which are flow measures and thus can change relatively

quickly, leverage is persistent. Lemmon, Roberts, and Zender (2008) show that leverage can drift for 20 years toward a new target level. Thus, it is unreasonable to expect firms to fully adjust their leverage immediately following the deregulation, especially when less than a quarter of firms raise capital each year. Rather, we expect that treated firms will begin drifting toward their new, potentially lower, target leverage post-2008. We test this prediction using a change in leverage specification that relies solely on within-firm variation. In Panel C of Table A3, two of the three measures presented in Table 8 confirm the tenor of our finding that treated firms reduce their leverage after deregulation. Overall, the evidence in Table A3 suggests that our estimates remain similar if we rely exclusively on time-series variation.

In Table A4, we continue to include firm fixed effects and restrict the sample to firms that cross the \$75 million threshold in the pre- or post-regulation period. This more focused test amounts to asking whether crossing the \$75 million threshold has different consequences in the pre- versus the post-period. In Table A4, we show that our results get statistically stronger and economically larger when we focus on the subset of firms that cross the regulatory threshold. Panel B documents significant increases in firm investment, and Panel C shows significant drops in firm debt-to-assets ratios.

4. Defining the sample around the \$75 million threshold

In our main analyses, we restrict our sample to firms with a public float between \$10 and \$150 million. We choose this sample because it balances the need for statistical power with our assumption that the treated and untreated firms are similar. Inevitably, the firms in the treated group are smaller than those in the non-affected group. Throughout all of our tests, we explicitly control for firm size by including controls for the firm's public float, the natural log of market capitalization, and the natural log of total assets.

In this section, we show that our findings are similar when using different bandwidths around the \$75 million public float threshold. Columns 1 and 2 of Table A5 replicate our main analyses using a tighter \$25 to \$125 million public float band, and Columns 3 and 4 present the same results using a wider \$10 to \$300 million band. Table A5 shows that our main findings are robust to both alternative bandwidths.

Notably, the tighter band reduces power and increases the potential measurement error in defining treatment status, because some firms might cross the \$75 million threshold and change their status in-between our annual public float numbers, which are measured at the end of the second fiscal quarter.¹ The wider band widens the gap in firm size between the treated and untreated firms. While our results are not sensitive to the exact band, we feel confident that the \$10 million to \$150 million bands we use in the paper provide a reasonable trade-off between statistical power and the comparability of firms on either side of the \$75 million public float threshold. Nevertheless, it is reassuring that our empirical results do not depend on the bandwidth.

5. Litigation risk

In table A8 we regress a dummy variable equal to one if a company was targeted in a particular year by a securities class action lawsuit according to the Stanford Law School's Securities Class Action Filings Database. In column one we document that the firms affected by the rule we study were indeed less likely to be targeted after the new rule relative to the unaffected firms. In column two, we find that this difference is not statistically significant once we control for firm characteristics. These results suggest that the increase in shelf issuance after the rule was passed did not coincide with increased litigation risk, and might have even decreased the litigation

¹ Although we exclude firms between \$70 and \$80 million in public float from all of our analyses to mitigate this concern, a firm can still cross the \$75 million threshold and have a public float above \$80 million between two measurements.

risk faced by the affected firms.

6. Strategic exchange listings

It is possible that firms strategically decide to list on an exchange after the rule takes effect in order to issue equity using Form S-3. This could bias our results because firms that take these actions might be nonrandom. For example, firms self-selecting into Form S-3 eligibility might be more likely to use public equity markets. If more small firms are becoming exchange-listed in order to use the new rule, we would see more exchange-listed firms under the \$75 million cutoff after the 2008 rule. However, we do not find any evidence that more small firms become exchange-listed in the post-2008 versus pre-2008 period. This finding, combined with our evidence that our results remain consistent when using only within-firm variation, makes it unlikely that our study suffers from such a bias.

7. Placebo tests

Next, we impose two arbitrary public float–based cut-offs to investigate whether we observe similar changes in behavior surrounding the 2008 deregulation as we do around the \$75 million cutoff. These placebo tests provide evidence on the extent to which unobserved changes in the characteristics of small firms around the time of the deregulation can lead mechanically to some of the results in our paper. Our placebo tests partition our main test sample into two subgroups, firms under \$75 million in public float and firms between \$75 million and \$150 million in public float. Thus, there is no variation in actual treatment within each subsample. Within each group, we define a firm as (placebo) treated if they have public float below the midpoint of public float in each respective subsample (\$40 million for the below-\$75 million subsample and \$115 million for the above-\$75 million subsample).

Table A6 indicates that there are no significant differences in issuance, investment, or capital structure behavior between the treated and untreated firms in these placebo tests, with the exception of a reduction in shelf and PIPE issuance in one of the upper placebo groups. Both differences are significant at the 10% level. The PIPE result is in the same direction as our results, but the shelf result is significant in the opposite direction. These results could be due to chance or to measurement error in our treatment status.

To explore the latter explanation, we conduct a more stringent placebo test, leaving a larger buffer around the \$75 million cutoff. Specifically, we restrict the lower and upper placebo samples to firms that are between \$10 and \$60 million in public float and \$90 to \$150 million in public float, respectively. Table A7 indicates no statistically significant differences between the placebo treated and untreated groups in terms of issuance, investment, or leverage. Thus, it does not appear that our results are mechanically driven by a sudden change in the propensity of small firms to issue public equity.

References:

Gao, X., Ritter, J., and Zhu, Z., 2013. Where have all the IPOs gone? *Journal of Financial and Quantitative Analysis* 48, 1663-1692.

Doidge, C., Karolyi, A., and Stulz, R., 2016. The U.S. listing gap. *Journal of Financial Economics*, *Forthcoming*.

Lemmon, M., Roberts, M. R., and Zender, J. F., 2008. Back to the beginning: Persistence and the cross-section of corporate capital structure. *Journal of Finance* 63, 1575–1608.

Table A1 Sample size and issuance activity over time

This table presents descriptive statistics on the number of firms in our sample and seasoned equity offering (SEO) and private investment in public equity (PIPE) issuance activity for each year in our sample, where years are defined based on the public float report date as in our regression analysis. We also apply all data filters used in our regressions analysis, except that we do not exclude the crisis period.

Year	Total Firm Count	Firms Issuing Public Equity	Percent Issuing Public Equity	Firms Issuing PIPEs	Percent Issuing PIPEs
2002	1,535	45	2.93	90	5.86
2003	1,219	107	8.78	138	11.32
2004	1,051	53	5.04	66	6.28
2005	1,013	65	6.42	83	8.19
2006	919	65	7.07	64	6.96
2007	815	40	4.91	42	5.15
2008	952	52	5.46	14	1.47
2009	976	162	16.60	34	3.48
2010	817	130	15.91	26	3.18
2011	685	75	10.95	15	2.19
2012	689	91	13.21	15	2.18
Total	10,671	885	8.29	587	5.50

Table A2 Results including the financial crisis period

This table replicates our main results from Tables 3, 7, and 8 but includes the financial crisis period. Panel A replicates Table 3 with the dependent variables being *Public Shelf Frequency*, *Ln(Public Shelf Proceeds)*, *PIPE Frequency*, *Ln(PIPE Proceeds)*, in Columns 1 through 4, respectively. Panel B similarly replicates our investment results in Table 7 with dependent variables *Investment-to-Assets* and *Capx-to-PPENT*, and Panel C replicates our leverage results in Table 8 with dependent variables *Liabilities-to-Assets*, *Debt-to-Assets*, and *Long-Term-Debt-to-Assets*. *Treated* is an indicator equal to one if the firm has a public float less than \$75 million. The *Post* period is defined as fiscal years ending after December 2008. All models contain the same control variables as in Tables 3, 7, and 8, which are defined in Table A1. For brevity, all variables are winsorized at the 1% level. Below the coefficients, we present *t*-statistics using robust standard errors clustered at the firm level. *, **, and *** indicate significance at the 10%, 5%, and 1% level, respectively.

Panel A: Issuance results

Variable	<i>Public Shelf Frequency</i> (1)	<i>Ln (Public Shelf Proceeds)</i> (2)	<i>PIPE Frequency</i> (3)	<i>Ln(PIPE Proceeds)</i> (4)
<i>Treated x Post</i>	0.036*** (2.94)	0.512** (2.51)	-0.019** (-2.29)	-0.282** (-2.15)
Adj. <i>R</i> -squared	0.175	0.169	0.097	0.096
Number of observations	10,585	10,585	10,585	10,585

Panel B: Investment results

Variable	<i>Investment-to- Assets</i> (1)	<i>Capx-to-PPENT</i> (2)
<i>Treated x Post</i>	0.512** (2.09)	3.183* (1.77)
Adj. <i>R</i> -squared	0.349	0.160
Number of observations	10,585	10,541

Panel C: Capital Structure results

Variable	<i>Liabilities-to-Assets</i> (1)	<i>Debt-to-Assets</i> (2)	<i>Long-Term-Debt-to- Assets</i> (3)
<i>Treated x Post</i>	-4.234*** (-4.02)	-2.237** (-2.51)	-1.712** (-2.05)
Adj. <i>R</i> -squared	0.361	0.392	0.352
Number of observations	10,566	10,566	10,566

Table A3 Results based on within-firm estimations: full sample

This table replicates our main results from Tables 3, 7, and 8 but exploits only within-firm variation. On average, each firm remains in our sample for approximately three years, as we have 2,858 unique firms and 8,780 firm-years. Panel A replicates Table 3 with the dependent variables being *Public Shelf Frequency*, *Ln(Public Shelf Proceeds)*, *PIPE Frequency*, *Ln(PIPE Proceeds)*, in Columns 1 through 4, respectively. Panel B similarly replicates our investment results in Table 7 with dependent variables *Investment-to-Assets* and *Capx-to-PPENT*. Panel C replicates the capital structure results (Table 7) with dependent variables *Change in Liabilities-to-Assets*, *Change in Debt-to-Assets*, and *Change in Long-Term-Debt-to-Assets* using a change specification. *Treated* is an indicator equal to one if the firm has a public float less than \$75 million. The *Post* period is defined as fiscal years ending after December 2008. All models contain the same control variables as in Tables 3, 7, and 8, which are defined in Table A1. All variables are winsorized at the 1% level. Below the coefficients, we present *t*-statistics using robust standard errors clustered at the firm level. *, **, and *** indicate significance at the 10%, 5%, and 1% level, respectively.

Panel A: Issuance results with firm fixed effects

Variable	<i>Public Shelf Frequency</i> (1)	<i>Ln (Public Shelf Proceeds)</i> (2)	<i>PIPE Frequency</i> (3)	<i>Ln(PIPE Proceeds)</i> (4)
<i>Treated x Post</i>	0.049** (2.14)	0.774** (2.01)	-0.022 (-1.30)	-0.351 (-1.27)
Adj. <i>R</i> -squared	0.339	0.339	0.182	0.184
Number of observations	8,780	8,780	8,780	8,780

Panel B: Investment results with firm fixed effects

Variable	<i>Investment-to- Assets</i> (1)	<i>Capx-to-PPENT</i> (2)
<i>Treated x Post</i>	0.606 (1.51)	4.883 (1.44)
Adj. <i>R</i> -squared	0.585	0.319
Number of observations	8,780	8,750

Panel C: Capital structure results with change specification

Variable	<i>Change in Liabilities-to-Assets</i> (1)	<i>Change in Debt-to-Assets</i> (2)	<i>Change in Long- Term-Debt-to-Assets</i> (3)
<i>Treated x Post</i>	1.173 (0.27)	-1.468 (-0.74)	-2.057* (-1.92)
Adj. <i>R</i> -squared	0.002	0.155	0.267
Number of observations	8,767	8,767	8,767

Table A4 Results based on within-firm estimations: Firms changing treatment status

This table replicates our main results from Tables 3, 7, and 8 but exploits only within-firm variation. This analysis restricts the sample to firms that cross the \$75 million public float threshold at some point during our sample period. Panel A replicates Table 3 with the dependent variables being *Public Shelf Frequency*, *Ln(Public Shelf Proceeds)*, *PIPE Frequency*, *Ln(PIPE Proceeds)*, in Columns 1 through 4, respectively. Panel B similarly replicates our investment results in Table 7 with dependent variables *Investment to Assets* and *Capx to Physical Capital*. Panel C replicates the capital structure results (Table 8) with dependent variables *Change in Liabilities to Assets*, *Change in Debt to Assets* and *Change in Long-Term Debt to Assets* using a change specification. *Treated* is an indicator equal to one if the firm has a public float less than \$75 million. The *Post* period is defined as fiscal years ending after December 2008. All models contain the same control variables as in Tables 3, 7, and 8, which are defined in Table A1. All variables are winsorized at the 1% level. Below the coefficients, we present *t*-statistics using robust standard errors clustered at the firm level. *, **, and *** indicate significance at the 10%, 5%, and 1% level, respectively.

Panel A: Issuance results with firm fixed effects

Variable	<i>Public Shelf Frequency</i> (1)	<i>Ln (Public Shelf Proceeds)</i> (2)	<i>PIPE Frequency</i> (3)	<i>Ln(PIPE Proceeds)</i> (4)
<i>Treated x Post</i>	0.069** (2.38)	1.118** (2.28)	-0.029 (-1.29)	-0.481 (-1.31)
Adj. <i>R</i> -squared	0.333	0.330	0.191	0.192
Number of observations	3,666	3,666	3,666	3,666

Panel B: Investment results with firm fixed effects

Variable	<i>Investment-to- Assets</i> (1)	<i>Capx-to-PPENT</i> (2)
<i>Treated x Post</i>	0.795* (1.75)	2.773 (0.73)
Adj. <i>R</i> -squared	0.563	0.337
Number of observations	3,666	3,657

Panel C: Capital structure results with change specification

Variable	(1) <i>Change in Liabilities-to-Assets</i>	(2) <i>Change in Debt-to-Assets</i>	(3) <i>Change in Long- Term-Debt-to-Assets</i>
<i>Treated x Post</i>	-1.584 (-0.83)	-3.539** (-2.02)	-2.976* (-1.96)
Adj. <i>R</i> -squared	0.048	0.314	0.296
Number of observations	3,661	3,661	3,661

Table A5 Results using alternative public float bands

This table presents difference-in-differences results based on the specification in Equation (1) similar to the results in Tables 3, 7, and 8. In Columns 1 and 2 of each panel, the sample contains only firms with public floats between \$25 and \$125 million, compared to our baseline bandwidth of \$10 to \$150 million in public float. In Columns 3 and 4, the sample contains firms with between \$10 and \$300 million in public float. Panel A replicates Columns 2 and 4 of Table 3. The dependent variable in Columns 1 and 3 is $\ln(\text{Public Shelf Proceeds})$, abbreviated as *Shelf Proceeds*, and the dependent variable in Columns 2 and 4 is $\ln(\text{PIPE Proceeds})$, abbreviated as *PIPE Proceeds*. Panel B similarly replicates our investment results in Table 7 with dependent variables *Investment-to-Assets*, abbreviated as *Inv.-to-Assets*, and *Capx-to-PPENT*, while Panel C replicates our leverage results from Columns 1 and 3 of Table 8 with dependent variables *Liabilities-to-Assets*, abbreviated *Lia.-to-Assets*, and *Long-Term-Debt-to-Assets*, abbreviated *LTD-to-Assets*. The *Post* period is defined as fiscal years ending after December 2008. All models contain the same control variables as in Tables 3, 7, and 8, which are defined in Table A1. All variables are winsorized at the 1% level. Below the coefficients, we present *t*-statistics using robust standard errors clustered at the firm level. *, **, and *** indicate significance at the 10%, 5%, and 1% level, respectively.

Panel A: Issuance results

Variable	\$25 - \$125 PFL <i>Shelf Proceeds</i> (1)	\$25 - \$125 PFL <i>PIPE Proceeds</i> (2)	\$10 - \$300 PFL <i>Shelf Proceeds</i> (3)	\$10 - \$300 PFL <i>PIPE Proceeds</i> (4)
<i>Treated x Post</i>	1.314*** (4.30)	-0.276 (-1.42)	0.847*** (4.39)	-0.382*** (-3.20)
Adj. <i>R</i> -squared	0.175	0.107	0.154	0.090
Number of observations	5,730	5,730	12,096	12,096

Panel B: Investment results

Variable	\$25 - \$125 PFL <i>Inv.-to-Assets</i> (1)	\$25 - \$125 PFL <i>Capx-to-PPENT</i> (2)	\$10 - \$300 PFL <i>Inv.-to-Assets</i> (3)	\$10 - \$300 PFL <i>Capx-to-PPENT</i> (4)
<i>Treated x Post</i>	0.717** (1.97)	6.587** (2.41)	0.561** (2.23)	3.660** (2.13)
Adj. <i>R</i> -squared	0.366	0.162	0.396	0.187
Number of observations	5,730	5,708	12,096	12,062

Panel C: Capital structure results

Variable	\$25 - \$125 PFL <i>Lia.-to-Assets</i> (1)	\$25 - \$125 PFL <i>LTD-to-Assets</i> (2)	\$10 - \$300 PFL <i>Lia.-to-Assets</i> (3)	\$10 - \$300 PFL <i>LTD-to-Assets</i> (4)
<i>Treated x Post</i>	-4.904*** (-3.34)	-3.036** (-2.41)	-3.696*** (-3.52)	-1.637* (-1.96)
Adj. <i>R</i> -squared	0.368	0.362	0.370	0.360
Number of observations	5,720	5,720	12,076	12,076

Table A6 Litigation Risk

This table presents difference-in-differences results based on the specification in Equation (1). Column 1 conducts ordinary least squares with the dependent variable, *Lawsuit*, equal to one for a firm-year during which the firm was targeted by a securities class action lawsuit according to the Stanford Law School's Securities Class Action Filings Database. In Column 2, we add controls. All explanatory variables are defined as of the beginning of the year over which we measure issuance activity. *Treated* is an indicator equal to one if the firm has a public float less than \$75 million. The *Post* period is defined as fiscal years ending before December 2008. All other variables are defined in Table A1. We winsorize all variables at the 1% level and include year and Fama and French 49 industry fixed effects. Below the coefficients, we present *t*-statistics using robust standard errors clustered at the firm level. *, **, and *** indicate significance at the 10%, 5%, and 1% level, respectively.

	<i>Lawsuit</i> (1)	<i>Lawsuit</i> (2)
<i>Treated</i> × <i>Post</i>	-0.016** (-2.56)	-0.010 (-1.42)
<i>Treated</i>		-0.006 (-0.89)
<i>Public Float</i>		-0.0001 (-1.33)
<i>Ln(Total Assets)</i>		0.002 (0.75)
<i>Ln(Market Cap)</i>		0.007** (2.24)
<i>Market to Book</i>		0.001 (0.72)
<i>Previous Year Return</i>		-0.002 (-1.42)
<i>Profitability</i>		-0.001 (-0.15)
<i>Tangibility</i>		0.0004 (0.06)
<i>Cash to Assets</i>		0.007 (1.17)
<i>Debt to Assets</i>		0.013 (1.51)
<i>Institutional Ownership</i>		-0.00001 (-0.35)
<i>Ln(Years Public)</i>		-0.006** (-2.52)
<i>Default Probability</i>		0.002 (0.23)
Adj. <i>R</i> -squared	0.003	0.009
Number of observations	8,780	8,780

Table A7 Placebo tests: Full sample

This table presents difference-in-differences results based on the specification in Equation (1) for two placebo tests related to the results in Tables 3, 7, and 8. In Columns 1 and 2 of each panel, the sample contains only firms with public floats between \$10 and \$70 million. In these columns, *Treated* equals one for firms with a public float less than the sample midpoint of \$40 million. In Columns 3 and 4, the sample contains only firms with public floats between \$80 and \$150 million. In these columns, *Treated* equals one for firms with a public float less than the sample midpoint of \$115 million. Panel A replicates Columns 2 and 4 of Table 3. The dependent variable in Columns 1 and 3 is $\ln(\text{Public Shelf Proceeds})$, abbreviated as *Shelf Proceeds*, and the dependent variable in Columns 2 and 4 is $\ln(\text{PIPE Proceeds})$, abbreviated as *PIPE Proceeds*. Panel B similarly replicates our investment results in Table 7 with dependent variables *Investment-to-Assets*, abbreviated as *Inv.-to-Assets*, and *Capx-to-PPENT*, while Panel C replicates our leverage results from Columns 1 and 3 of Table 8 with dependent variables *Liabilities-to-Assets*, abbreviated *Lia.-to-Assets*, and *Long-Term-Debt-to-Assets*, abbreviated *LTD-to-Assets*. The *Post* period is defined as fiscal years ending after December 2008. All models contain the same control variables as in Tables 3, 7, and 8, which are defined in Table A1. All variables are winsorized at the 1% level. Below the coefficients, we present *t*-statistics using robust standard errors clustered at the firm level. *, **, and *** indicate significance at the 10%, 5%, and 1% level, respectively.

Panel A: Issuance results placebo test

Variable	Lower Placebo <i>Shelf Proceeds</i> (1)	Lower Placebo <i>PIPE Proceeds</i> (2)	Upper Placebo <i>Shelf Proceeds</i> (3)	Upper Placebo <i>PIPE Proceeds</i> (4)
<i>Treated x Post</i>	-0.082 (-0.31)	0.165 (0.82)	-0.726* (-1.71)	-0.418* (-1.78)
Adj. <i>R</i> -squared	0.144	0.108	0.207	0.087
Number of observations	6,016	6,016	2,764	2,764

Panel B: Investment results placebo test

Variable	Lower Placebo <i>Inv.-to-Assets</i> (1)	Lower Placebo <i>Capx-to-PPENT</i> (2)	Upper Placebo <i>Inv.-to-Assets</i> (3)	Upper Placebo <i>Capx-to-PPENT</i> (4)
<i>Treated x Post</i>	0.341 (0.92)	-1.055 (-0.38)	-0.066 (-0.16)	-1.690 (-0.54)
Adj. <i>R</i> -squared	0.330	0.147	0.427	0.194
Number of observations	6,016	5,994	2,764	2,756

Panel C: Capital structure results placebo test

Variable	Lower Placebo <i>Lia.-to-Assets</i> (1)	Lower Placebo <i>LTD-to-Assets</i> (2)	Upper Placebo <i>Lia.-to-Assets</i> (3)	Upper Placebo <i>LTD-to-Assets</i> (4)
<i>Treated x Post</i>	1.627 (1.16)	1.051 (1.08)	-0.608 (-0.35)	1.064 (0.69)
Adj. <i>R</i> -squared	0.358	0.346	0.403	0.402
Number of observations	6,003	6,003	2,759	2,759

Table A8 Placebo tests: Restricted sample

This table presents difference-in-differences results based on the specification in Equation (1) for two placebo tests related to the results in Tables 3, 7, and 8. In Columns 1 and 2 of each panel, the sample contains only firms with public floats between \$10 and \$60 million. In these columns, *Treated* equals one for firms with a public float less than the sample midpoint of \$35 million. In Columns 3 and 4, the sample contains only firms with public floats between \$90 and \$150 million. In these columns, *Treated* equals one for firms with a public float less than the sample midpoint of \$120 million. Panel A replicates Columns 2 and 4 of Table 3. The dependent variable in Columns 1 and 3 is $\ln(\text{Public Shelf Proceeds})$, abbreviated as *Shelf Proceeds*, and the dependent variable in Columns 2 and 4 is $\ln(\text{PIPE Proceeds})$, abbreviated as *PIPE Proceeds*. Panel B similarly replicates our investment results in Table 7 with dependent variables *Investment-to-Assets*, abbreviated as *Inv.-to-Assets*, and *Capx-to-PPENT*, while Panel C replicates our leverage results from Columns 1 and 3 of Table 8 with dependent variables *Liabilities-to-Assets*, abbreviated *Lia.-to-Assets*, and *Long-Term-Debt-to-Assets*, abbreviated *LTD-to-Assets*. All explanatory variables are defined as of the beginning of the year. The *Post* period is defined as fiscal years ending after December 2008. All models contain the same control variables as in Tables 3, 7, and 8, which are defined in Table A1. All variables are winsorized at the 1% level. Below the coefficients, we present *t*-statistics using robust standard errors clustered at the firm level. *, **, and *** indicate significance at the 10%, 5%, and 1% level, respectively.

Panel A: Issuance results placebo test

Variable	Lower Placebo <i>Shelf Proceeds</i> (1)	Lower Placebo <i>PIPE Proceeds</i> (2)	Upper Placebo <i>Shelf Proceeds</i> (3)	Upper Placebo <i>PIPE Proceeds</i> (4)
<i>Treated x Post</i>	0.093 (0.34)	0.090 (0.42)	-0.706 (-1.43)	-0.081 (-0.33)
Adj. <i>R</i> -squared	0.127	0.114	0.207	0.076
Number of observations	5,404	5,404	2,264	2,264

Panel B: Investment results placebo test

Variable	Lower Placebo <i>Inv.-to-Assets</i> (1)	Lower Placebo <i>Capx-to-PPENT</i> (2)	Upper Placebo <i>Inv.-to-Assets</i> (3)	Upper Placebo <i>Capx-to-PPENT</i> (4)
<i>Treated x Post</i>	0.468 (1.21)	0.620 (0.21)	0.171 (0.39)	-1.685 (-0.46)
Adj. <i>R</i> -squared	0.326	0.144	0.432	0.202
Number of observations	5,404	5,387	2,264	2,257

Panel C: Capital structure results placebo test

Variable	Lower Placebo <i>Lia.-to-Assets</i> (1)	Lower Placebo <i>LTD-to-Assets</i> (2)	Upper Placebo <i>Lia.-to-Assets</i> (3)	Upper Placebo <i>LTD-to-Assets</i> (4)
<i>Treated x Post</i>	1.609 (1.09)	1.223 (1.16)	-1.417 (-0.75)	1.385 (0.95)
Adj. <i>R</i> -squared	0.356	0.347	0.390	0.393
Number of observations	5,392	5,392	2,262	2,262