Regulation and Initial Capital Structure: Evidence from the JOBS Act



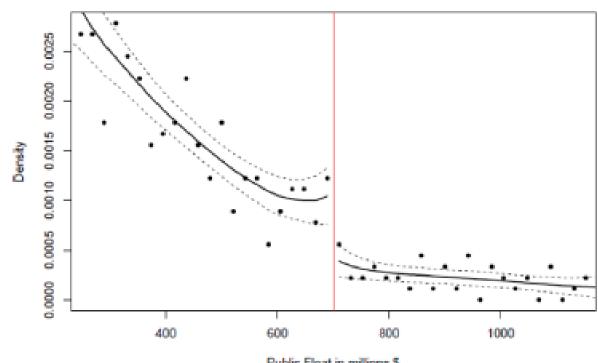
Khaled Alsabah & Katie Moon University of Colorado Boulder



Introduction

How firms choose their initial capital structures? We exploit how the JOBS Act which exempted newly public firms from regulatory burdens can affect capital structure.

Fig 1



Firms qualifying as Emerging Growth Company (EGC) are the subset of IPO firms that benefit from reduced regulations of the Act. Fig1 shows that EGC maintain their public float amount below the EGC-qualification threshold up to three years since IPOs. We reject the null of continuity in public float at the \$700 million threshold. No discontinuity existed before the Act.

Hypothesis

Hypothesis 1: Post-Act EGC firms will have equity financing deficit.

Hypothesis 2: Post-Act firm leverage will be higher for EGC firms with higher equity financing deficit and will persist even after EGC status expires.

Empirical Design

- 1. Using McCrary density test we show no sorting around the \$700 threshold before the Act but sorting after the Act, **Fig 1**.
- 2. We estimate counterfactual public float amount and calculate public float deficit (PFD), **Table 1**.
- 3. Using the estimated PFD, we test whether debt financing substitutes for PFD. **Table 2**

Results

1. Is PDF higher for EGC firms? YES

Table 1

	(1) 200≤Public Float≤1200	Public Float Deficit (2) 400≤Public Float≤1000	(3) 500≤Public Float≤900
Treated × Post	265.68***	262.38***	114.27*
	(55.69)	(61.30)	(68.78)
Treated	-162.71***	-143.12***	-100.89*
	(46.31)	(49.07)	(53.31)
Post	42.44	21.42	63.65
	(28.32)	(35.56)	(48.21)
Year FE	Yes	Yes	Yes
Industry FE	Yes	Yes	Yes
Observations	3,676	2,063	1,039
Adjusted R-squared	0.06	0.07	0.12

Table 1 shows that treated firms, predicted to have PF above \$700 million, have \$260 million PFD after the Act relative to control firms (the interaction terms).

2. Do firms with higher PFD require greater debt financing? YES

Table 2

	Leverage			
	(1)	(2)	(3)	(4)
PFD	0.01*** (0.002)	0.02*** (0.002)	0.01*** (0.002)	0.02*** (0.002)
PFD \times Treated \times Post			0.06** (0.03)	0.05** (0.02)
Treated			10.65*** (1.75)	-4.41*** (1.71)
Post	-0.51 (2.98)	3.78 (2.73)	0.55 (3.09)	2.78 (2.89)
${\bf Treated}\times{\bf Post}$			-10.10* (5.20)	-3.61 (4.97)
$\mathrm{PFD} \times \mathrm{Treated}$			0.003 (0.004)	-0.001 (0.003)
$\mathrm{PFD} \times \mathrm{Post}$			0.004 (0.01)	-0.003 (0.01)
Controls		Yes		Yes
Industry FE	Yes	Yes	Yes	Yes
Year FE	Yes	Yes	Yes	Yes
Observations	4,618	4,618	4,618	4,618
Adjusted R-squared	0.18	0.35	0.20	0.35

Table 2 shows that a PFD (PFD*Treated*Post) of \$1M is associated with a 0.01-0.02% (0.05-0.06%) increase in leverage. Given the average PFD is \$200M, this translates into 2-4% in Col. 1 & 2 and 10-12% in Col. 3 and 4.

3. Does the higher leverage of treated firms persist even after benefits of EGC expire? YES

Table 3

	(1) 200≤PF≤1200	Leverage (2) 400≤PF≤1000	(3) 500≤PF≤900
Post	15.06***	16.90***	17.84***
	(4.43)	(5.58)	(6.43)
M/B	0.11	0.19	0.38
	(0.57)	(0.61)	(0.69)
PPE/A	0.14	0.21	0.14
	(0.14)	(0.17)	(0.20)
EBITDA/A	0.15	0.19	0.31**
	(0.12)	(0.13)	(0.15)
RDD	16.00***	14.41**	18.41***
	(5.23)	(5.65)	(6.42)
R&D/A	-0.06	-0.09	-0.05
	(0.26)	(0.29)	(0.39)
Age	-0.27	0.57	1.29
	(1.46)	(1.74)	(2.19)
Nasdaq90	0.09	0.13	0.12
	(0.08)	(0.09)	(0.11)
Hot	-0.44	-4.08	-6.54
	(3.87)	(4.44)	(5.12)
Cold	15.56***	12.07**	10.43
	(5.32)	(6.06)	(6.68)
Industry FE	Yes	Yes	Yes
Observations	248	202	162
Adjusted R2-squared	0.24	0.25	0.28

Table 3 shows that even after EGC firms lose their status they continue to hold 15% more leverage than similar firms in the pre-Act period.

Conclusion

Implications of the results:

- 1. Even relatively large firms do value the EGC benefits and thus manipulate their public float.
- 2. Manipulating public float below the threshold has unintended consequences of substituting equity financing for debt financing.
- 3. The higher leverage persists after the EGC status expires, indicating capital structure is sticky.
- 4. Investments do not appear to be distorted by this public float bunching.