

Online Appendix

The Jobs Act Did Not Raise IPO Underpricing

Table A1: IPO aftermarket returns: DID regression analysis complete output

Table A2: First-day returns: Additional robustness tests

Table A3: First-day returns: Relation to Barth et al. (2017)

Table A4: First-day returns: Relation to Chaplinsky et al. (2017)

Acknowledgements: We thank Ernst & Young LLP for providing the data on the use of Title I provisions. We thank David Aboody, Chris Holmes (EY), Edwin Hu (SEC), Robert Jackson (SEC), Daniel Klausner (PwC), Polia Nair (EY), George Papadakis (SEC), Steven Solomon, Brett Trueman, and seminar participants at Berkeley Law and Ernst & Young LLP for helpful comments and discussions. We also thank the Office of Investor Education and Advocacy of the U.S. Securities and Exchange Commission for information regarding the JOBS Act. We gratefully acknowledge financial support from the Center for Financial Research and Management at Berkeley Haas.

The views expressed in the paper are the views of the authors and do not represent in any way the views of Ernst & Young LLP.

Table A1
IPO aftermarket returns: DID regression analysis complete output

	<i>Dependent Variable =</i>					
	<i>ARET[D]</i>		<i>ARET[W]</i>		<i>ARET[M]</i>	
<i>EGC × POST</i>	-0.027	(-0.58)	-0.014	(-0.26)	-0.035	(-0.52)
<i>EGC</i>	-0.011	(-0.25)	-0.036	(-0.96)	-0.047	(-0.78)
<i>POST</i>	0.050	(1.57)	0.066**	(1.97)	0.119***	(2.64)
<i>log(Age)</i>	-0.003	(-0.20)	0.000	(-0.02)	0.001	(0.06)
<i>log(AT)</i>	-0.020	(-1.54)	-0.014	(-1.20)	-0.008	(-0.43)
<i>log(Revenues)</i>	-0.006	(-0.31)	-0.008	(-0.50)	-0.020	(-1.03)
<i>Log(Proceeds)</i>	0.027	(0.67)	0.021	(0.61)	0.015	(0.46)
<i>%Retained</i>	0.106	(0.78)	0.091	(0.73)	0.065	(0.49)
<i>%Δ(Offer Price)</i>	0.680***	(9.60)	0.643***	(9.13)	0.539***	(6.12)
<i>log(Days to IPO)</i>	-0.044**	(-2.27)	-0.037	(-1.37)	-0.045*	(-1.67)
<i>Return on Assets</i>	0.109**	(2.14)	0.179***	(4.11)	0.136***	(3.69)
<i>R&D Intensity</i>	-0.087***	(-3.01)	-0.029	(-0.70)	-0.086*	(-1.95)
<i>CAPEX Intensity</i>	0.050	(0.22)	-0.026	(-0.18)	0.050	(0.44)
<i>I(NI < 0)</i>	0.009	(0.50)	0.005	(0.20)	-0.034**	(-2.06)
<i>I(BVE < 0)</i>	0.013	(0.41)	0.013	(0.42)	0.027	(0.84)
<i>I(R&D > 0)</i>	-0.051	(-1.58)	-0.038	(-0.97)	-0.029	(-0.67)
<i>I(VC)</i>	0.081***	(4.05)	0.088**	(2.58)	0.096	(1.51)
<i>I(Soft Tech)</i>	0.077***	(3.82)	0.021	(1.10)	-0.017	(-0.67)
<i>I(Bio Tech)</i>	0.058	(1.28)	0.048	(1.06)	0.108**	(2.14)
<i>I(NASDAQ)</i>	0.108***	(2.63)	0.122**	(2.20)	0.171***	(2.74)
<i>I(NYSE)</i>	0.066	(1.48)	0.072*	(1.72)	0.125**	(2.56)
<i>I(HQU)</i>	0.036	(1.63)	0.030	(1.06)	0.047	(1.52)
<i>I(BIG4)</i>	0.012	(0.65)	-0.001	(-0.03)	0.020	(0.94)
<i># IPO₋₉₀</i>	0.000	(0.33)	0.000	(0.32)	0.000	(-0.56)
<i>NASDAQ₋₉₀</i>	0.258***	(3.53)	0.160**	(2.04)	0.209*	(1.74)
Sector Fixed Effects	Yes		Yes		Yes	
Adj. R ²	27%		23%		18%	
Obs.	677		677		677	

This table reports DID regression results for our sample of EGC and large issuers pre- and post-JOBS Act. The set of left-hand-side variables includes the buy-and-hold market-adjusted returns from the IPO offer price to the closing price at the end of the first day (*D*), first week (*W*), and first month of trading (*M*). The set of right-hand-side variables includes the indicator for EGC issuers (*EGC*), the indicator for the post-JOBS Act period (*POST*), the interaction *EGC × POST*, a vector of issuer characteristics described in Appendix 2, and sector fixed effects based on two-digit GICS codes. We report T-statistics in parentheses. ***, **, and * indicate statistical significance at the 1%, 5%, and 10% level, respectively, using two-tailed tests. Standard errors are clustered by two-digit GICS code and IPO month. The sample includes 677 U.S. IPOs from January 1, 2009, to December 31, 2015.

Table A2
First-day returns: Additional robustness tests

	<i>Dependent Variable = ARET[D]</i>					
	P-Score matched		Exclude mega issuers		Exclude unicorn IPOs	
	(1)	(2)	(3)	(4)	(5)	(6)
<i>EGC</i> × <i>POST</i>	0.004 (0.21)	0.008 (0.21)	-0.007 (-0.19)	-0.018 (-0.36)	-0.007 (-0.21)	-0.024 (-0.54)
<i>EGC</i>	0.070* (1.67)	0.022 (0.51)	0.068* (1.72)	-0.019 (-0.37)	0.072* (1.88)	-0.012 (-0.27)
<i>POST</i>	0.034*** (2.62)	0.032 (1.51)	0.074*** (3.69)	0.038 (1.06)	0.065*** (3.18)	0.050 (1.44)
Issuer Characteristics	No	Yes	No	Yes	No	Yes
Sector Fixed Effects	No	Yes	No	Yes	No	Yes
Adj. R ²	1%	29%	2%	27%	1%	27%
Obs.	452	452	666	666	664	664

Description: This table reports DID regression results zeroing on the differential pre-post JOBS Act change in first-day returns. The sample in columns (1) and (2) includes propensity-score matched EGC and large issuers. We match pre- with post-JOBS Act issuers separately in the treatment and control groups using nearest-neighbor propensity-score matching (without replacement) by sector. We estimate the propensity scores using the entire vector $C_{k,i}$ of issuer characteristics. The sample in columns (3) and (4) excludes large issuers with pre-IPO revenues in excess of \$10BN. The sample in columns (5) and (6) excludes unicorn IPOs. Using data from CB Insights' tracker of billion-dollar VC-backed exits, we identify 12 Unicorn non-SRC EGC issuers and 1 Unicorn large issuer between November 2, 2013, and December 31, 2015. The sample period is from January 1, 2009, to December 31, 2015. The set of right-hand-side variables includes the indicator for EGC issuers (*EGC*), the indicator for the post-JOBS Act period (*POST*), the interaction *EGC* × *POST*, a vector of issuer characteristics described in Appendix 2, and sector fixed effects based on two-digit GICS codes. We report T-statistics in parentheses. ***, **, and * indicate statistical significance at the 1%, 5%, and 10% level, respectively, using two-tailed tests. Standard errors are clustered by two-digit GICS code and IPO month.

Interpretation: The DID analysis of first-day returns are robust to p-score matched sample and samples that exclude mega issuers and unicorn IPOs.

Table A3
First-day returns: Relation to Barth et al. (2017)

	<i>Dependent Variable = ARET[D]</i>					
	Include SRCs in our treatment group		Restrict pre-post period		Robust regression	
	(1)	(2)	(3)	(4)	(5)	(6)
<i>EGC</i> × <i>POST</i>	0.005 (0.18)	-0.005 (-0.12)	-0.019 (-0.44)	-0.061 (-1.05)	-0.027 (-1.09)	-0.001 (-0.04)
<i>EGC</i>	0.066* (1.93)	-0.036 (-0.82)	0.070* (1.89)	-0.007 (-0.17)	0.052*** (2.93)	0.022 (0.86)
<i>POST</i>	0.066*** (3.28)	0.057* (1.69)	0.121*** (3.89)	0.081** (2.18)	0.040** (2.13)	0.038** (1.99)
Issuer Characteristics	No	Yes	No	Yes	No	Yes
Sector Fixed Effects	No	Yes	No	Yes	No	Yes
Adj. R ²	2%	24%	4%	32%	0%	31%
Obs.	741	741	387	387	677	677

Description: This table reports DID regression results zeroing on the differential pre-post JOBS Act change in first-day returns. In columns (1) and (2), we include SRCs in the treatment group of EGC issuers. In columns (3) and (4), we restrict our baseline sample within the period between July 1, 2009, and December 31, 2013. In columns (5) and (6), we report robust regression results based on Yohai's (1987) MM-estimator for our baseline sample. Appendix 2 provides the variable definitions. We report T-statistics in parentheses. ***, **, and * indicate statistical significance at the 1%, 5%, and 10% level, respectively, using two-tailed tests. Standard errors are clustered by two-digit GICS code and IPO month.

Interpretation: The DID analysis of first-day returns is robust to adding SRC issuers to our treatment group, using Barth et al.'s (2017) sample period, and conducting robust regression analysis.

Table A4
First-day returns: Relation to Chaplinsky et al. (2017)

	<i>Dependent Variable = ARET[D]</i>			
	Use below \$75MN proceed issuers as only control group		Use SRC issuers as only control group	
	(1)	(2)	(3)	(4)
<i>EGC</i> × <i>POST</i>	0.131** (2.29)	0.100 (1.54)	-0.038 (-0.44)	-0.055 (-0.60)
<i>EGC</i>	0.072** (2.08)	0.038 (1.14)	0.054 (0.93)	-0.050 (-0.88)
<i>POST</i>	-0.003 (-0.13)	0.003 (0.07)	0.105 (1.50)	0.096 (0.99)
Issuer Characteristics	No	Yes	No	Yes
Sector Fixed Effects	No	Yes	No	Yes
Adj. R ²	9%	25%	1%	24%
Obs.	646	646	646	646

Description: This table reports DID regression results zeroing on the differential pre-post JOBS Act change in first-day returns. The sample in columns (1) and (2) consists of SRC EGCs, defined as IPO issuers with gross proceeds below \$75MN as the control group and non-SRC EGC issuers as the treatment group. The sample in columns (3) and (4) consists of SRC EGCs, identified using hand-collected information directly from the IPO registration statement, as the control group and non-SRC EGC issuers as the treatment group. The sample period is from January 1, 2009, to December 31, 2015. The set of right-hand-side variables includes the indicator for EGC issuers (*EGC*), the indicator for the post-JOBS Act period (*POST*), the interaction *EGC* × *POST*, a vector of issuer characteristics described in Appendix 2, and sector fixed effects based on two-digit GICS codes. We report T-statistics in parentheses. ***, **, and * indicate statistical significance at the 1%, 5%, and 10% level, respectively, using two-tailed tests. Standard errors are clustered by two-digit GICS code and IPO month.

Interpretation: This table provides evidence that the misclassification of non-SRC EGC issuers as SRCs leads to spurious evidence of an increase in first-day returns.