Disclosure, Firm Growth, and the JOBS Act[‡]

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Abstract

We study the effects of regulatory disclosure on investment and growth by comparing newly public firms before and after they lose disclosure exemptions under the Jumpstart Our Business Startups (JOBS) Act. Exempt firms invest more in physical assets, innovation, and acquisitions than firms that lose exemptions, but experience steeper declines in growth opportunities over time. Firms that lose exemptions exhibit better allocation of equity to investments and utilization of existing assets, which improves their Tobin's q. Relaxing disclosure requirements seems to induce inefficiencies in managerial investment decisions and hence inhibits firms from exploiting or adding to their growth opportunities.

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Introduction

Does lowering the disclosure requirements for public companies reduce accountability and shareholder value, or does it allow managers to focus on company-building and growth? Proponents of lower disclosure argue that the administrative burden of reporting diverts managers from capital investment and innovation, and discourages them from raising public equity (IPO Task Force, 2011). Recent studies support these claims by showing that public firms innovate less after their initial public offering (IPO) (Bernstein, 2015), invest less than private firms (Asker, Farre-Mensa and Ljungqvist, 2015), and are less risk-taking under stricter disclosure (Kang, Liu and Qi, 2010).

In this paper, we study the effects of regulatory disclosure requirements on the financing, investment, and growth opportunities of a subset of public firms that were previously exempt from such obligations under the Jumpstart Our Business Startups (JOBS) Act. Our main finding is that exempt firms invest more in physical assets, innovation, and acquisitions than firms which have lost their exemptions, but experience steeper declines in Tobin's q over time. Among firms no longer exempt, we find a more positive relation between equity raising and investment, and a shift towards more efficient utilization of existing assets, which lead to a strong improvement in their Tobin's q. Our findings highlight a previously unrecognized outcome of the JOBS Act, and suggest that, by giving firms the flexibility to select their optimal level of disclosure, the Act is leading them to grow their assets but not to add value.[1]

Previous work suggests that financing investment in future growth is an important motive for firms to go public (Brau and Fawcett, 2006; Ritter and Welch, 2002). Newly public firms fund investments mainly through public equity issues (Choe, Masulis and Nanda, 1993; Lowry, 2003), and facilitate growth by building new capacity through capital expenditure (capex) and innovation (Asker, Farre-Mensa and Ljungqvist, 2015; Brown, Fazzari and Petersen, 2009), as well as by acquiring the assets of other firms (Aslan and Kumar, 2011; Brau, Francis and Kohers, 2003). It is plausible that relaxing the disclosure burden facilitates such investments without inducing short-term performance pressures in managers. On the other hand, reduced disclosure limits investors' ability to monitor managers and provides incomplete information

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[1] As is common in the finance and accounting literature, we use the terms "firm value" and "growth opportunities" interchangeably throughout the paper.

about managerial risk-taking and the long-term value of their investment decisions.

The JOBS Act was passed on April 5, 2012 to ease the regulatory disclosure burden on firms going public by creating a new issuer category named "Emerging Growth Company" (EGC).[2] EGCs are newly public firms that benefit from certain *deburdening* provisions post-IPO, including reduced disclosure requirements while raising public equity, as well as waivers on auditor attestation and disclosure of executive pay. Under Title I of the Act, these exemptions can last for up to five years as long as the EGC's *float* is below $700 million.[3]

We investigate the effect of financing and investment decisions on the growth opportunities of EGCs before and after they lose disclosure exemptions under the JOBS Act (and become *ExEGCs*). However, identifying how a firm's EGC status affects future growth is empirically challenging. This is mainly because the JOBS Act bundles Title I along with other provisions to facilitate fundraising, especially in private markets.[4] Identifying a control group of public firms unaffected by the Act is also difficult as the vast majority of post-JOBS IPO issuers have opted for EGC status, and there have been changes in the type of firm going public after the Act's passage (Dambra, Field and Gustafson, 2015).

To address these challenges, we use a regression discontinuity (RD) design for our analysis. Specifically, we exploit the fact that an EGC will cease to remain exempt any time during the first five years if its float exceeds $700 million on the last day of the most recent second fiscal quarter. EGCs that remain below this threshold continue to be exempt whereas those that cross it become "Large Accelerated Filers" (LAFs) subject to full disclosure under securities laws. Our RD framework compares EGCs below the $700 million cutoff with ExEGCs above that are no longer exempt.[5] This design provides a quasi-natural experiment in which the disclosure

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[2] Title I was drafted based on proposals of the initial public offering (IPO) Task Force, which had identified uncertainty in the IPO process, high reporting costs, and managerial focus on compliance rather than innovation and firm building as hampering the revival of US public markets (IPO Task Force, 2011). Prior legal scholarship has also called for significant modification or repeal of mandatory disclosure required under US securities laws (Greenstone, Oyer and Vissing-Jorgensen, 2006; Mahoney, 1997; Palmiter, 1999; Romano, 1998).

[3] Market value of common equity held by non-controlling, public investors. Other conditions needed to maintain EGC status for the full five-year period are discussed in Section 1.

[4] See Appendix C for a detailed overview of these provisions.

[5] The empirical methodology used in this paper is similar to the quasi-difference-in-differences framework used by Chaplinsky, Hanley and Moon (2017) to study changes in costs of going public in response to the JOBS Act, and by Dambra and Gustafson (2021) to study how the JOBS Act's provisions affect investment and innovation during the first two years after IPO. Both studies compare firms under $75 million float at IPO (that had been benefiting from disclosure and compliance exemptions as a "Smaller Reporting Company" since 2008) to IPO

requirements intensify for a subset of public firms that were previously exempt from them. With this design, we avoid confounding the effect of the LAF rule on EGCs with unobserved shocks to all publicly traded firms.[6]

We recognize that EGCs may actively manipulate their float to stay below the cutoff and avoid compliance with the LAF rule. To correct for this, we use the float six months before the *LAF day* (last day of second fiscal quarter) as an instrument to predict loss of EGC status. The float six months prior does not itself determine whether an EGC will remain exempt for the next fiscal year, and thus has no direct bearing on whether it retains or loses its status on the LAF day. However, the instrument strongly predicts the float on the LAF day, which solely determines the firm's future status as an EGC. We conduct several tests to establish the validity of our instrument and find that float manipulation occurs mostly during the six months preceding the LAF day and when the float is closer to the cutoff, but much less so otherwise. In other words, EGCs are unlikely to actively avoid having a float above $700 million unless the threat of losing disclosure exemptions is imminent.

We first investigate equity and debt issuance by EGCs before and after they lose exemptions. EGCs that lose exemptions and become ExEGCs tilt their capital raising towards debt rather than equity. For the median EGC with $116 million in assets, this amounts to a $39 million increase in debt issuance following loss of exemptions. The fact that equity raising is lower relative to debt issuance under stricter disclosure is consistent with EGCs preferring to issue equity under the Act's disclosure exemptions (despite the associated loss of transparency for investors and higher cost of issuance).[7]

We next explore the real effects of disclosure by investigating how it affects investments by EGCs when they lose exemptions. Capex falls by 19% (representing $16 million less yearly spending on physical assets by the median EGC) while annual R&D expenditure drops by 14% (equivalent to $12 million for the median EGC). There is also a 18% decline in acquisitions

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firms with float above this threshold that would have qualified for similar exemptions only under the JOBS Act.

[6] A drawback of the RD method, as noted by Leuz and Wysocki (2016) (p.564), is that our results do not generalize to EGCs with a float much larger (or smaller) than the cutoff, or to firms subject to mandatory disclosure for other reasons. However, analysing the LAF rule is important since it is the main reason why the median duration that an EGC remains exempt is only two years, and calls to question whether the JOBS Act has been able to stimulate capital raising and firm growth.

[7] See Barth, Landsman and Taylor (2017) and Chaplinsky, Hanley and Moon (2017) for related evidence that EGCs value the JOBS Act's provisions highly despite greater investor uncertainty and higher IPO issuance costs.

and a 15% drop in the use of cash as acquisition currency once an EGC becomes an ExEGC. These results suggest that stricter disclosure requirements constrain ExEGCs from pursuing new investments. While evidence that reduced disclosure increases investment in innovation and acquisitions has featured in recent literature (Balogh, Creedy and Wright, 2021; Dambra and Gustafson, 2021), we show that these effects are reversed once mandatory disclosure becomes applicable. Moreover, the increase in investments under reduced disclosure is rather short-lived since the average EGC[8] loses its exemptions due to the LAF rule within two years of going public.

Prior studies note that investment falls under stricter disclosure because it diverts managerial attention from pursuing new investment opportunities (Bernstein, 2015; Coates and Srinivasan, 2014; Dambra and Gustafson, 2021). However, if disclosure improves external monitoring (Leuz and Wysocki, 2016), it should also improve the efficiency with which ExEGCs allocate capital to investments relative to EGCs. Consistent with these hypotheses, we find equity raising by EGCs to be less associated with investments in capex, innovation and employees than among ExEGCs, where these relationships are positive and significant. This evidence suggests that freedom from disclosure encourages inefficient equity allocation that is difficult for stock market investors to monitor. On the other hand, debt does not feature strongly in the investments by EGCs. This finding is consistent with young firms funding their internal activities, especially innovation, mainly using equity (Brown, Fazzari and Petersen, 2009).

As for external investments in the form of acquisitions, we find no association between equity or debt raised by EGCs and their acquisition activity. However, ExEGCs seem to time their equity issuance, at least partly, to fund acquisitions. This finding once again points to stricter disclosure creating strong managerial incentives to improve investment efficiency.

If stricter disclosure allows better monitoring and focuses managerial attention on investing efficiently, it follows that a switch to ExEGC status should also provide substantial valuation benefits. To test this hypothesis, we use the Tobin's q ratio as an ex-ante measure of firm value and growth. Tobin's q reflects the value placed by the market on the firm's assets relative to their book value, and incorporates long-term growth created from investment in physical and

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[8] This represents all the EGCs in our sample, including those EGCs with public float outside the $350 million – $1,050 million range used in the empirical analysis.

intangible assets as well as acquisitions (Ho, Tjahjapranata and Yap, 2006; Lang, Lins and Maffett, 2012).[9] We find that Tobin's q declines more rapidly over time for EGCs than for ExEGCs. Moreover, the fraction of ExEGCs with a Tobin's q exceeding their Tobin's q at IPO is consistently higher than that of EGCs. These findings indicate that even though EGCs invest more in physical assets, innovation, and acquisitions, they are less capable of generating incremental growth opportunities than their fully disclosing peers. This causes real economic losses as exhibited by the lower market valuation of EGC firms.

To better understand the channels through which changes in disclosure affect firm growth, we study how fundraising and investment decisions by firms conditional on their EGC status affect their Tobin's q in the following year. We find both equity and debt raised by EGCs to be associated with a lower Tobin's q. Conversely, a one standard deviation increase in equity (debt) issuance by an ExEGC leads to an increase of 1.81 (0.85) in its Tobin's q. The sensitivity of Tobin's q to EGC status and equity raising is expected because Title I restricts the level of information revealed to the stock market during equity issuance. We also find that EGC investments in capex, PPE, and R&D exert a negative effect on Tobin's q. This relation reverses among ExEGCs – except in the case of R&D, likely because future benefits accruing from innovation are harder to value than similar investment in physical assets. By contrast, there is a positive association between acquisitions by an EGC and its future Tobin's q, which is reversed for ExEGCs. A possible explanation for this result is that managers are incentivized to overstate the goodwill portion of the purchase price of an acquisition, and project better growth prospects from such deals, when disclosure requirements are low. Overall, we conclude that fundraising is less efficient, and that investments made under reduced disclosure contribute less value to the firm than under full disclosure.

Lastly, in line with the above results, we find that EGCs become more profitable, earn better returns on investment, and are less financially constrained upon transitioning to full disclosure.

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[9] Tobin's q is an appropriate proxy of growth opportunities for our setting since newly public firms invest mainly in innovation (Bernstein, 2015; Dambra and Gustafson, 2021), which is an intangible investment that contributes to the long-term growth of the firm. Tobin's q also represents the firm's ability to generate cash flow from its assets over the long term, including those that accrue with significant delay. Relatedly, Ho, Tjahjapranata and Yap (2006) argue that using an ex-post measure of firm value or performance obscures the real effects of innovation since they could be affected by the firm's endogenous characteristics and market conditions during the intervening period. Lang, Lins and Maffett (2012) note that Tobin's q also inherently incorporates the cost of capital used to discount future cash flows.

This evidence suggests that stricter disclosure causes EGC managers to shift focus from pursuing new investments towards improving profitability through the efficient utilization of existing assets. It also implies that stricter disclosure has a disciplining effect on firms, leading them to shift from engaging in capacity building and innovation towards lowering costs and improving the earnings potential of existing products and services.

Although our RD framework is well-suited to identify how mandatory disclosure affects the investment and future growth of EGCs, it makes no explicit consideration of the underlying causal mechanisms. However, we believe that our RD design imposes significant restrictions on any nondisclosure-related interpretation of our results. Although media reports suggest that the JOBS Act has simplified the IPO process and freed up managers from compliance (Teach, 2014), we find that the resulting loss of information to investors contributes to a lower growth trajectory for EGC firms.

Our paper makes several contributions to literature. First, our findings highlight that the real benefits of mandatory disclosure, as measured by growth opportunities, outweigh the managerial freedom and cost savings resulting from deburdening regulations like the JOBS Act. This contributes new evidence to the literature that has focused on how disclosure affects corporate investment (Coates and Srinivasan, 2014; Dambra and Gustafson, 2021; Gao and Zhang, 2018; Kraft, Vashishtha and Venkatachalam, 2018), but has largely been silent on how disclosure-contingent financing and investment affect firm growth. Second, our paper adds to the literature on the determinants of firm value (Bushee and Leuz, 2005; Greenstone, Oyer and Vissing-Jorgensen, 2006; Loderer, Stulz and Waelchli, 2017), and shows that Tobin's q falls more rapidly over time among disclosure-exempt firms. Third, our paper contributes to the vast literature on why firms invest and innovate. Recent work in this field shows that the JOBS Act led to more investment in innovation (Dambra and Gustafson, 2021) and acquisitions (Balogh, Creedy and Wright, 2021) among newly public firms (i.e., EGCs) compared to firms that went public before the Act. We add to this literature by studying whether EGC managers carry out these activities efficiently, and show that investing under reduced disclosure does not lead them to exploit growth opportunities or make investments that are considered value-adding by investors.[10]

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[10] We provide additional evidence in online appendices D and E that EGCs experience an increase in compliance

Our paper proceeds as follows. Section 1 provides an overview of the institutional setting and related literature. Section 2 describes the empirical framework. Section 3 describes the data. Section 4 presents the empirical analysis and results. Finally, Section 5 concludes.

1. Institutional setting and related literature

The JOBS Act represents one of the most significant deregulation of US securities laws in the past four decades. It was enacted to stem the decline in the number of IPOs and of companies listed on US stock exchanges (Doidge, Karolyi and Stulz, 2017; Gao, Ritter and Zhu, 2013), and improve access to capital particularly for emerging, high-growth companies.

The main feature of the JOBS Act called "Title I" (formally "Reopening American Capital Markets to Emerging Growth Companies") went into effect on April 5, 2012.[11] Title I contains several *on-ramp* exemptions that permit firms with revenue below $1 billion in the most recent fiscal year to skip certain registration requirements and go public as an *Emerging Growth Company* (EGC).[12] Title I also contains several *de-burdening* provisions that reduce mandatory financial and executive disclosure during IPO filing and in subsequent reporting. Principal among these is *scaled disclosure* under which an EGC may omit disclosing items related to executive compensation and management performance.[13] Title I further exempts EGCs from Section 404(b) of the Sarbanes-Oxley Act (SOX) that mandates external auditor attestation of the quality and reliability of the firm's financial reporting. The primary goal of these provisions is to encourage newly public firms to raise capital that can be used to "grow their businesses,

costs after they lose their exemptions. Specifically, we show that EGCs face an increase in audit fees and have weaker control over earnings and revenue recognition upon loss of exemptions. The rise in compliance costs under stricter disclosure explains, at least in part, why many EGCs attempt to prolong their exemptions by manipulating their float to stay below the $700 million threshold.

[11] See Table C1 in the appendix for a detailed timeline of the JOBS Act.

[12] These on-ramp provisions include: (i) *Confidential filing* of draft registration statements (via Form S-1), allowing would-be issuers to get feedback from the SEC before the filings are made public, and (ii) *Testing-the-waters* (TTW), permitting issuers to engage with prospective investors and gauge their interest in the offer.[12] TTW overrides the previous ban on communication with investors prior to a public offer. These provisions allow an EGC to withdraw its offer and avoid disclosing confidential information, or proceed by making its filings public at least 21 days before commencing the roadshow.

[13] Specifically, under scaled disclosure provisions, EGCs must include only two, rather than three, years of audited financial statements in its offer filings. EGCs must provide basic compensation details of only three, rather than five, executive officers, and are exempt from *Say-on-Pay* and *Say-on-Golden Parachute* voting requirements under Section 951 of the Dodd-Frank Act. EGCs can also opt not to discuss the relationship between management performance and executive compensation, nor to reveal the CEO's salary relative to median employee wage.

pursue promising new products and innovations, and create jobs" (IPO Task Force, 2011).

Not surprisingly, the JOBS Act has not only generated much interest in the media but has also been the subject of several academic studies in the fields of finance, law, and accounting. An early study by Dambra, Field and Gustafson (2015) finds the on-ramp provisions as particularly popular among firms going public, resulting in a 25% rise in IPO volume over pre-JOBS levels. However, their study does not explore whether IPO firms opting to become an EGC were indeed the kind targeted by policymakers: emerging, high-growth companies. We address this question in the current paper.

Barth, Landsman and Taylor (2017) and Chaplinsky, Hanley and Moon (2017) study the quality of information disclosure by EGCs during their IPO. They find that EGCs eliminate some of the previously mandated disclosures, thereby causing greater information uncertainty in the IPO market and an escalation in the costs of going public. Dambra and Gustafson (2021) investigate how the de-burdening provisions of the JOBS Act affect the investment and innovation of newly public EGCs. The empirical setting in both Chaplinsky, Hanley and Moon (2017) and Dambra and Gustafson (2021) is the subset of firms whose float is just above or below $75 million. Firms above this threshold (Non-Smaller Reporting Companies, *NonSRCs*) are eligible for the JOBS Act's de-burdening provisions while firms below the threshold (Smaller Reporting Companies, *SRCs*) have had access to similar exemptions since February 2008.[14] Using this framework, Dambra and Gustafson (2021) find that NonSRCs going public after the Act invest more during the first year following their IPO, relative to NonSRCs that went public earlier as well as SRCs both before and after the Act. They also find that this rise in investment among NonSRC EGCs is concentrated in R&D, but not capex. Since Dambra and Gustafson (2021) restrict their analysis to smaller firms with a float around $75 million, their findings are not generalizable to EGCs whose float is, or moves, away from this threshold. We overcome these limitations by focusing on EGCs around a larger threshold of $700 million up to which they can remain exempt from disclosure.

Dambra and Gustafson (2021) further limit their analysis of EGCs to their first eight quarters as a public company, and do not consider subsequent fundraising or the long-run effects of

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[14] Although SRCs do not qualify for de-burdening provisions under the JOBS Act, they however do qualify for on-ramp exemptions similar to EGCs.

changes in disclosure requirements post-IPO. We are not subject to these limitations, and show that most EGCs lose exemptions in under eight quarters after IPO (in contrast to the maximum exemption period of five years during which EGCs are allowed to utilize the Act's provisions when raising additional capital in public markets).[15] We then show that this early change in disclosure status among EGCs contributes to significant changes in firm behaviour in terms of their capital raising and allocation decisions, and how it affects investors' ability to monitor and evaluate these decisions. For the purposes of our main empirical analysis, we consider all EGCs with float between $350 million and $1,050 million (i.e., firms larger than SRCs that went public only by utilizing the JOBS Act's provisions).

An EGC can lose its exemptions any time during the five years after IPO if it meets any of the following conditions: (i) annual gross revenue exceeds $1 billion ($1.07 billion since 2017), (ii) total non-convertible debt issued during the past three years exceeds $1 billion, and (iii) the float is $700 million or more as of the last business day of the most recently completed second fiscal quarter. If an EGC breaches the $700 million float threshold it loses its exemptions under the JOBS Act's provisions and becomes a "Large Accelerated Filer" (LAF) subject to mandatory disclosure requirements. The imposition of LAF requirements obliges EGCs to include five years of financial data (compared to only two years of such data required of EGCs), compensation disclosure of five executives (three in the case of EGCs), and management discussion and analysis (not required for EGCs) in subsequent filings and offer registration statements. In addition, LAF rules also require both managerial assessment and external auditor attestation of internal reporting controls to be included in the annual 10-K filing (only the first of these is required in the case of EGCs).

These facts suggest that the imposition of LAF requirements entails significant changes in the volume and credibility of information revealed by EGCs, which can affect the market's ability to scrutinize managerial decisions and pose a considerable escalation of reporting costs. Naturally, EGCs have the incentive to prolong their exempt status for as long as possible and delay becoming an LAF.

Given these considerations, we focus on the LAF regulation, which is a potential constraint for many EGCs, while the other two conditions that would deprive them of their EGC status

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[15] In fact, we show in Appendix B that EGC firms raise considerable equity in public markets following their IPO.

are rarely met by newly public companies. The disclosure requirements of the LAF regulation are an incentive for some EGCs to remain as such, and raises the question whether they are able to remain exempt for the maximum possible period. Firms with investment needs may want to return to the public markets before they cease to be an EGC if they find the lower disclosure costs and freedom from reporting obligations under the JOBS Act appealing. In fact, they could even attempt to delay enforcement of the LAF rule and prolong their time as an EGC by manipulating their float or by substituting public equity with debt financing.[16]

The main contribution of this paper is to isolate the regulatory effects of losing EGC status and becoming a fully disclosing company (as an LAF) from other contemporaneous changes in securities regulation and market conditions. We focus on the effect of the LAF regulation on fundraising, internal and external investments, and firm value. Together these are an important area of study because the JOBS Act was intended for emerging, high-growth companies that are expected to have substantial funding needs.

Dambra, Field and Gustafson (2015) note that the on-ramp provisions of the JOBS Act prevail over its de-burdening provisions during IPO, and likely cause a different type of firm to go public. A question remains whether these provisions affect firms' fundraising decisions and investments post-IPO, especially given the threat of transition to full disclosure under the LAF rule. Relatedly, Alsabah and Moon (2020) estimate the float deficit for newly public firms after the JOBS Act by comparing the actual float to a predicted value based on pre-JOBS sample estimations. They find that firms having a float deficit with respect to the $700 million LAF threshold are likely to raise more debt. However, their analysis considers book leverage only, does not account for changes in the type of firm going public after the Act, and does not consider equity issuance post-IPO that would directly affect the float. Our study differs by quantifying the direct effects of the LAF rule on EGCs, and how this rule impacts the financing, investment, and growth trajectory of these firms. For this we use clean treatment and control groups around the LAF threshold, as discussed in the next section.

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[16] Note that once an EGC becomes an LAF, it can subsequently transition to "accelerated filer" or "non-accelerated filer" status should its float fall below $560 million. However, such transitions do not reduce the disclosure burden substantially (at least up to the extent that disclosure exemptions benefit EGCs). We therefore regard a change to LAF status as permanent in our analysis.

2. Identification

Our aim is to investigate the effects of mandatory disclosure on fundraising, investment policies, and the growth opportunities of EGC firms. A naïve approach to test how the LAF rule matters would be to compare related outcomes for EGCs and firms that went public before the JOBS Act in a cross-sectional setting. However, this method would not capture the causal effects of the LAF rule on EGC firms, since they may have different characteristics compared to firms that went public before the Act and did not have the benefit of disclosure exemptions at the time of their IPO.

We employ two unique strategies to overcome this problem. First, we take EGCs that went public on or before December 31, 2017 and construct a rolling window sample for each firm in this set, starting from the first day of the third fiscal quarter of year t (after the IPO) to the last day of the second fiscal quarter of year $t+1$ (spanning four quarters per window).[17] An EGC enters the sample if its float is below \$700 million at the start of the first window after its IPO. At each window end, the firm remains an EGC if it has a float below \$700 million and does not get delisted during this period. Alternatively, the firm is classified as an *ExEGC* if its float exceeds \$700 million by the window end. An EGC that loses its exemptions to the LAF rule cannot be reclassified as an EGC. This sample construction method enables us to isolate the effects of LAF regulation on EGC firms from other unrelated factors.

Second, we use a regression discontinuity (RD) design for estimation. This design is based on the method used by Iliev (2010) to study the impact of Section 404 of the Sarbanes-Oxley Act (SOX) on public firms. Our RD method compares the outcomes of interest for EGCs that find themselves either above or below the \$700 million cutoff at each window end (second fiscal quarter of year $t+1$). EGCs below the cutoff remain exempt from disclosure whereas EGCs above the cutoff will cease to be exempt and become an LAF (i.e., an ExEGC). As a result, an ExEGC is required to submit quarterly and annual reports, management report of internal controls, and independent audit reports at the end of each fiscal year to the SEC.

Our RD design focuses on EGCs around the \$700 million cutoff as it reduces bias from

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[17] Fiscal years are different from calendar years. A fiscal year covers twelve consecutive months spanning four quarters, with a start date that differs across firms. For example, some firms begin their fiscal year on 1st January and end on 31st December, while others have a fiscal year from 1st April to 31st March of the following year.

unobservable characteristics that might be confounded with float and the outcomes of interest. Accordingly, the estimated difference in outcomes between EGC and ExEGC firms can be ascribed directly to the loss of EGC exemptions. Our baseline specification is:

$$Y_t = \beta_1.ExEGC_t + \beta_2.X_t + \gamma.f(PF_t) + \delta_j + \lambda_t + \varepsilon \qquad (1)$$

where *ExEGC* is a dummy equal to one if the float of an EGC exceeds $700 million on the last day of second fiscal quarter in year t, and zero otherwise. X_t is a vector of observable EGC characteristics. Coefficient β_1 identifies the causal effect of EGC status loss on the outcome of interest Y_t at year end. An unbiased estimation of β_1 requires strong assumptions about the unknown relationship between Y_t and the float, PF_t. These assumptions are required because estimating treatment effects near the cutoff might also require use of data further away from the cutoff (Lee and Lemieux, 2010). We thus adopt two complementary strategies to estimate equation (1) when the functional dependence of Y_t on PF_t is unknown. First, we restrict the sample to a specific bandwidth h on either side of the treatment to minimize biases in the RD estimation. Focusing on EGCs within this narrow bandwidth minimizes bias from unobservable factors that might be confounded with PF_t. Second, we include up to the third order polynomial in $f(PF_t)$ to eliminate any non-linear effects of PF_t on Y_t.

One major assumption of this sharp RD design is that EGCs do not anticipate status loss due to the LAF regulation and have no influence over their float. If this assumption holds, then OLS regressions based on equation (1) will provide true, unbiased estimates of the impact of EGC status loss on Y_t. Contrarily, OLS estimates will be biased if some EGCs manipulate their float to evade becoming an LAF. We assess this in Figure 1 using the Cattaneo, Jansson and Ma (2019) test for discontinuities of the float density at the cutoff. The left-hand plot in Figure 1(a) presents the density of float at the end of each second fiscal quarter for EGCs. The density estimate at the cutoff has a *t*-statistic of -2.756 (*p*-value = 0.006). This suggests that some EGCs avoid losing their exemptions by manipulating their float. Firms can reduce their float by increasing the shares held by management through insider trades, or by lowering the value of outstanding equity through share repurchases. By contrast, the right-hand plot in Figure 1(a) presents a similar visualization for *NonEGC* firms that went public before the Act and had

revenue below $1 billion at IPO.[18] We do not reject the null of continuity as the *t*-statistic of the bias-corrected density is -0.169 (*p*-value = 0.866). This implies no break in the float distribution of firms that did not have access to exemptions under Title I.

--- Figure 1 ---

We correct for potential manipulation of the float using an instrumental variables (IV) design. Since the LAF rule applies on the last day of the second fiscal quarter (*LAF day*), EGCs may try to manipulate their float via share repurchases prior to this day. However, there is less incentive for them to undertake such expensive efforts unless their float is near the LAF threshold in the immediate period preceding the LAF day. This is evident from the left-hand plot in Figure 1(b), which shows that EGCs are more likely to buy back shares during the six months leading up to the LAF day as their float nears or exceeds the $700 million LAF cutoff. This tendency persists irrespective of the firm's age as a public company, meaning that continuous manipulation of the float is not very likely unless it is in the neighbourhood of the LAF cutoff. The right-hand plot shows that share buybacks are much less likely during the six months after the LAF day. Furthermore, Figure A1 in the appendix shows there is no discontinuity in the float of an EGC exactly six months prior to the LAF day. In sum, these tests provide strong evidence that any float manipulation by an EGC firm occurs mostly near the LAF threshold during the six months leading up to the LAF day.

Based on these insights, we use a dummy variable *PF700* that is equal to one if an EGC's float six months prior to the LAF day exceeds $700 million, as an instrument for *ExEGC*. That is, *ExEGC* as of the LAF day in year *t* is instrumented with *PF700* six months prior. *PF700* satisfies the two conditions required for a valid instrument. First, the float six months prior should strongly predict the float on the LAF day. This is evident from the scatterplot in Figure A2 showing a high correlation of 0.74 between *PF700* and *ExEGC*. Second, the instrument should have no direct bearing on the outcome of interest Y_t. The float at six months before the LAF day does not affect Y_t at fiscal year-end except through the instrumented term *ExEGC*. The IV design is based on the below two-stage model:

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[18] This analysis also includes firms with revenue below $1 billion that went public after the JOBS Act but opted out of EGC status.

$$ExEGC_{i,t} = \alpha_1 . PF700_{i,t,q-2} + \alpha_2 . X_{i,t} + \delta_j + \lambda_t + \varepsilon \qquad (2.1)$$

$$Y_t = \beta_1 . \widehat{ExEGC}_t + \beta_2 . X_t + \delta_j + \lambda_t + \varepsilon \qquad (2.2)$$

where $\widehat{ExEGC}_t$ is the predicted likelihood that the EGC *I* becomes an LAF in year *t*. $X_{i,t}$ denotes firm-level observables including financial characteristics, corporate governance, stock market conditions, and up to the cubic term of float. The coefficient β_1 represents the causal effect of EGC status loss on Y_t under the identifying assumption that firms are comparable in both observable and unobservable characteristics around the LAF cutoff. δ_j and λ_t are industry and year fixed effects, respectively. While it is impossible to evaluate whether firms around the treatment cutoff are similar in unobservable characteristics, we can still assess whether they are similar in their observable characteristics. In Figure A3 in the appendix, we plot observable EGC characteristics against the float, centered at the treatment cutoff. All the observable firm characteristics evolve smoothly over the entire range of the float, including near the cutoff.

3. Sample and descriptive statistics

3.1. Data description

To identify EGC firms, we gathered data on 5,186 completed IPOs of US firms between January 1, 2000 and April 30, 2019 from Capital IQ. Following earlier studies, we exclude IPOs of issuers classified as financial services firms, closed-end investment funds, holding companies, special purpose acquisition companies, and conglomerates. We also exclude rights offers, best-efforts offers, shell companies, and limited partnerships. This screening yields 3,595 IPOs. We then apply the following restrictions: (1) the IPO is listed on New York Stock Exchange (NYSE), Nasdaq, or American Stock Exchange (AMEX), (2) minimum offer value is $5 million, (3) minimum issuer age is three years, (4) at least 30 days of price data is available with the Center for Research in Security Prices (CRSP) from the IPO effective date, and (5) duration between initial filing and offer completion does not exceed 18 months. We then exclude firms with annual revenue over $1 billion at IPO as these would never have been eligible for EGC treatment. These steps yield a sample of 1,220 IPOs, of which 549 IPOs took place after the JOBS Act went into effect. We then retrieve S-1 filings for these IPOs from the SEC's Electronic Data Gathering, Analysis, and Retrieval (EDGAR) system. Following the

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JOBS Act, firms must explicitly state in their S-1 filings whether they do (not) qualify for EGC treatment.[19] Figure A4(a) in the appendix plots the number of S-1 filings of completed IPOs per year-quarter. There is a notable rise in IPOs after the JOBS Act, and an overwhelming majority of them are by EGC firms. Manual inspection of the filings reveals 523 EGCs in the sample, representing 95.8% of all firms that went public after the Act.

Our primary goal is to understand the effects of mandatory disclosure brought about by the LAF regulation on EGCs' fundraising choices, investment policy, and future growth. For this purpose, we obtain firm-level data from CRSP/Compustat. We also collect float data for the sample firms from 10-K filings between the years 2000 and 2019.[20] Firms that do not feature in Compustat are excluded. We then use a link table provided by WRDS to merge each 10-K filing with the corresponding firm-year observation in CRSP/Compustat using the central index key (CIK). Computing *PF700*, our instrument for *ExEGC*, is tricky as firms often do not report their float in quarterly 10-Q filings. We overcome this issue using data from Datastream and estimate *PF700* as the number of free float shares (NOSH * NOSHFF[21]) times closing price (P) exactly six months prior to the LAF day of a given firm.

Our analysis focuses on firms with float between $350 million and $1050 million, which effectively minimizes any potential confounding by other regulations.[22]

To investigate equity issuance by EGC firms, we use the variable *New Equity* denoting the dollar value of common stock issued by the firm via seasoned public offers (SPOs) during a

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[19] See Figure C1 for example of an S-1 filing for an IPO by an EGC firm.

[20] For firms with float missing in their annual 10K filings, we use data from Refinitiv Eikon to manually compute float as the product of the aggregate outstanding shares held by non-affiliates (free float) and closing price of the stock on the last trading day of the second fiscal quarter of that year.

[21] NOSHFF = 1 – NOSHST, where NOSHST represents the percentage of ordinary shares (NOSH) held by strategic investors (holding 5% or more of the firm's shares) and not available to ordinary shareholders. We assume that all strategic shareholdings are controlling, and thus do not fall under the 'ordinary" investor category defined by Datastream. We have checked with representatives at Datastream that this assumption is valid. Moreover, Even-Tov, Patatoukas and Yoon (2020) note that EGCs have very low levels of institutional ownership, implying that the NOSHFF measure is less likely to suffer from unobservable biases.

[22] These include (i) Scaled disclosure provisions introduced in 1992 for "small business issuers" with less than $25 million float, (ii) "Non-accelerated filer" provisions enacted in 2002 that grant firms below $75 million float 10(15) additional days to file quarterly (annual) statements with the SEC, (iii) SOX 404(b) that exempts firms below $75 float from requiring firms to use an external auditor to attest their internal reporting controls, also introduced in 2002, (iv) "Smaller reporting company" (SRC) rule of 2008 that allows some flexibility in disclosure for firms below $75 million float, and (v) "Accelerated filer" status for firms with annual revenue of $100 million or more and float between $75 and $700 million (Among these, firms with float between $75 and $250 million are treated as SRCs while firms with float above $250 million are not treated as SRCs, and are subject to higher disclosure requirements. These provisions apply only to NonEGC firms that went public before the JOBS Act).

fiscal year. To compute this variable, we collect data on all SPOs by US firms between January 1, 2000 and April 30, 2019 from Capital IQ and apply filters similar to those used in the IPO sample. Only SPOs that issue new primary stock independent of existing shareholders are included.[23] In total, we have 3,207 SPOs: 2,336 SPOs by NonEGCs and 841 SPOs by firms that went public as an EGC.[24] The SPOs are grouped by firm-year and gross proceeds aggregated to estimate *New Equity*. Furthermore, we manually scan the S-1 filing of each SPO to determine whether the issuer qualifies for EGC treatment when conducting the offer.[25] It is important to verify this because a firm can lose its EGC status prior to the maximum allowed period of five years, notably if it becomes an LAF.[26] Review of S-1 filings shows that of the 841 SPOs by firms that were an EGC at IPO, 593 SPOs were by EGC firms whereas 248 SPOs were by firms that no longer qualified for EGC treatment as they had become an LAF (i.e., *ExEGCs*).[27] We also collect data on funds used to repurchase common stock (PRSTKCC), denoted by the variable *Purchased Equity*.

Debt issuance in a given year is represented by the variable *New Debt*. It is the total annual long-term debt issued (DLTIS), and covers bonds, notes, lease obligations, debt reclassifications, and acquisition loans.[28]

We also estimate the cost of equity and debt issuance. Raising equity through an SPO entails a number of expenses, which can be broadly categorized into direct and indirect costs. Direct costs mainly comprise the fees charged by underwriters for conducting the SPO, and are available from Capital IQ. Accordingly, we measure *Direct Equity Costs* as the sum of

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[23] In Appendix B, we compare US SPO activity around the JOBS Act with an international control sample that is constructed using a similar methodology based on data from Capital IQ. The analysis suggests a substantial rise in US SPO activity following the JOBS Act, with EGCs driving a substantial part of equity raising in this market.

[24] Stock tickers of SPO issuers were compared to the IPO sample to identify issuers that went public as an EGC.

[25] See Appendix C2 for example of an S-1 filing for an SPO by an EGC firm.

[26] Analysis of 10-K filings reveals that the other two conditions that can lead to EGC disqualification, namely gross revenue exceeding $1 billion in the most recent fiscal year and total non-convertible debt issued in the last three years exceeding $1 billion, are rarely violated and hence not part of our analysis.

[27] Leary and Roberts (2005) and Cabezon (2020) define equity issuance as having occurred if the net change in common shares outstanding normalized by total assets in the previous year is greater than 5%. However, a change in common shares comprises not only new common stock issued through a public offer, but also conversion of preferred stock/debt to common stock and the exercise of stock options and warrants. In unreported analyses, we use alternative measures of *New Equity* based on this definition and also the dollar value of common stock sold in a given year from Compustat (SCSTKC). The results are consistent with our main findings, suggesting that conversions to common stock do not significantly impact the float.

[28] Item names in brackets refer to Compustat data items.

underwriting, legal, and other fees charged by intermediaries involved in an SPO scaled by offer proceeds. Indirect equity issuance costs, also known as underpricing, are the discounts offered by issuers on the offer price as compensation for the uncertainty and information asymmetry faced by investors during the offer process (Sherman and Titman, 2002). Underpricing also helps relieve any temporary price pressure resulting from the issue of a large block of new shares, and is used as a "sweetener" to entice investors to buy shares in the SPO (Corwin, 2003). Following Corwin (2003), we estimate *Indirect Equity Costs* as minus one times the difference between previous day's closing price and the SPO offer price, scaled by the previous day's closing price. Data on SPO offer price is from Capital IQ whereas closing price and aftermarket information on the underlying stock is from CRSP.

Estimating annual debt costs is more straightforward. Following Frank and Shen (2016), we measure *Debt Costs* using Compustat data as annual interest expense (XINT) divided by long-term debt (DLTT) plus debt in current liabilities (DLC).[29]

Our study covers both internal and external investments. We use Compustat data to estimate internal investments made by firms that comprise capital expenditures (*Capex,* CAPX), R&D expenses (*RD*, XRD), and employee headcount (*Employees*, EMP). *Capex* and *RD* are set to zero wherever data is missing. Besides investing internally, firms can make external investments via acquisitions to grow and expand. We capture the M&A activity of firms using Capital IQ data. The external investment measures considered are the number and dollar value of acquisitions by the firm during a year, as well as the percentage of transactions financed entirely by cash against some combination of cash and stock.

We follow prior literature and control for various firm-level characteristics that are typically associated with fundraising, financial constraints, and investment policy. We also control for firm size (total assets), age, and the quality of corporate governance proxied by board size and independence. Data for these are obtained from Compustat and BoardEx. All the variables are winsorized for outliers at the 1% and 99% levels.

One of the main objectives of the JOBS Act was to alleviate the problems faced by high-growth companies in accessing external funds, mainly by encouraging them to go public. This

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[29] We are unable to estimate debt issuance costs at the loan level since these are issued mostly in private (e.g., bank loans) and are seldom disclosed individually in quarterly/annual filings.

is a key focus of our investigation. For this purpose, we split EGCs into low-growth and high-growth firms based on their Tobin's *q* value on the first day of the IPO. Following Kaplan and Zingales (1997), we measure Tobin's *q* as a ratio of the market value of assets divided by book value of assets, where the former is computed as book value of assets plus the market value of common stock less the sum of the book value of common stock and deferred taxes.[30]

A Tobin's *q* above one (high-*q*) implies that the firm has more valuable growth opportunities as seen by outside investors, whereas a Tobin's *q* below one (low-*q*) denotes the opposite with the stock trading below the cost to replace the firm's assets. Figure A4(b) in the appendix plots the number of low-*q* and high-*q* EGC firms going public each year. High-*q* firms dominate the cohort of EGCs going public in any given year. Especially during the initial years after the Act (q1'2012–q4'2014) the number of high-*q* EGCs going public was up to three times as high as low-*q* EGCs. This result is consistent with Dambra, Field and Gustafson (2015), who find a significant rise in IPO activity in the biotech/pharma sectors during the first two years of the Act. However, our study goes a step further by measuring growth opportunities at the firm-level and differentiates between low-*q* and high-*q* firms within each industry.[31]

3.2. How significant is the LAF regulation for EGC firms?

By passing Title I of the JOBS Act, policymakers had hoped that unburdening firms for a limited period from costly disclosure requirements would encourage them to go public. Although firms going public after the Act have overwhelmingly opted for EGC status, whether they remain qualified for disclosure and compliance exemptions for the maximum five-year period remains unclear. Principal among the conditions that would make an EGC ineligible for these exemptions is the $700 million LAF threshold. Crossing this threshold means that the

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[30] Specifically, for firm *i* in year *t*,

$$Tobin's\ Q_{i,t} = \frac{Total\ Assets_{i,t} + Market\ Equity_{i,t} - Book\ Equity_{i,t}}{Total\ Assets_{i,t}}$$

where *Total Assets*$_{i,t}$ is the reported book value of assets, *Market Equity*$_{i,t}$ is stock price multiplied by common shares outstanding, *Book Equity*$_{i,t}$ is shareholder equity plus deferred taxes plus investment tax credits less preferred stock, as reported in the balance sheet. Consistent with extant literature, book values are as reported for a fiscal year (from Compustat) whereas market value of equity is as reported at calendar year end (from CRSP).
[31] Figure A4(b) further shows there is no significant difference in IPO activity between low-*q* and high-*q* firms in the years preceding the JOBS Act (q1'2000–q1'2012). This evidence shows that the type of firms entering public markets has fundamentally changed following enactment of the JOBS Act. See also the difference in Tobin's *q* between EGC (at IPO) and NonEGC firms in Table A1 in the online appendix.

firm will cease to be an EGC and is treated thereafter as an LAF subject to mandatory disclosure during financial reporting and while raising public equity.

--- Figure 2 ---

To address the question whether EGCs utilize the full scale of exemptions available to them under the JOBS Act, we measure the duration (in quarters) between the IPO date of an EGC and the date on which it becomes an ExEGC, i.e., subject to the LAF regulations. Figure 2(a) plots the distribution of this duration for 248 EGCs that lost their exemptions either owing to the LAF rule or upon completing the maximum treatment period of five years. The duration varies widely from one quarter for some EGCs to up to 21 quarters. Importantly, the mean EGC duration is only 8.5 quarters with nearly 47% of them (i.e., 22.3% of all 523 firms in our sample that went public as EGCs) losing exemptions within the first year of the IPO. Figure 2(b) presents violin plots of EGC duration by IPO year, which paint a similar story of underutilization of exemptions. Lastly, Figure 2(c) shows box plots of EGC duration among high-q and low-q EGC firms (based on Tobin's q at IPO). While median EGC duration is low and similar across both groups at 4.5 quarters, high-q EGCs generally remain exempt for longer periods than their low-q peers. One possible explanation for this discrepancy is that because high-q firms have greater financing needs, they have incentives to prolong EGC status for as long as possible to be able to raise more equity under the on-ramp provisions. Overall, these findings suggest that the majority of EGCs lose their disclosure exemptions within a short span of going public and that very few are able to utilize exemptions for longer periods.

What happens when a firm loses its EGC status? The $700 million LAF threshold poses a Catch-22 situation for EGC firms. On one hand, a natural objective of managers is stock price appreciation as it is tied to shareholder value, better executive pay, and the early exercise of stock options (Knopf, Nam and Thornton Jr, 2002). Higher stock prices further encourage firms to "time" the market and raise funds by issuing more stock through an SPO (Baker and Wurgler, 2002; DeAngelo, DeAngelo and Stulz, 2010; Kim and Weisbach, 2008). On the other hand, pursuing these goals could push an EGC over the LAF threshold, triggering an immediate escalation of disclosure requirements and related costs. This also poses another issue because the inability to utilize EGC provisions for the maximum duration may dissuade other firms from going public, thereby impeding the hoped-for revival of US public markets.

3.3. Descriptive statistics

Panel A of Table 1 reports summary statistics on all the EGC firms in our sample during the phase where they are exempt from mandatory disclosure. Panel B provides similar statistics for ExEGC firms that have crossed over into the mandatory regime under LAF. The mean EGC duration is 8.5 quarters, which is well below the maximum allowed exemption period of 5 years. During their years as an EGC, firms had a median float of $441 million, assets worth $116 million, annual sales of $87 million, and 791 employees. Among these, assets and sales increase significantly in the aftermath of an EGC's transition to ExEGC status. EGCs carry low debt burden with the mean debt-to-assets (*Debt/TA*) ratio at 18%. The mean Debt/TA among ExEGCs is higher by only 3%. Equity issuance among EGCs is modest during their exempt phase with a mean of $23.5 million, and increases by over three-fold upon their move to the mandatory setting. Debt issuance also exhibits a similar trend. Note however that the median equity and debt issuance per year are zero. This means only a fraction of EGCs are actively raising funds after their IPO.

--- Table 1 ---

The mean Tobin's *q* of an EGC is 1.42, and 1.66 in the case of ExEGCs. This indicates that there are renewed growth opportunities by EGCs after their switch to the LAF regime. EGCs have mean sales-to-assets and return-on-assets (ROA) ratios of 59% and -21%, respectively, and a profit margin below zero in nearly two-thirds of observations. These factors improve significantly once an EGC is no longer exempt, suggesting that the firm becomes operationally more efficient upon becoming subject to mandatory disclosure. Surprisingly, capital expenditures (Capex) and investments in property, plant, and equipment (PPE), relative to sales, are rather low among EGCs at a mean of 8% and 33%, respectively. R&D-to-sales among EGCs is high with a mean of 113% but is lower by more than half among firms in the ExEGC category. EGCs also actively pursue external growth opportunities. The median EGC makes at least one acquisition per year, spending a median of up to $71 million in this process. However, EGCs pursue fewer external growth opportunities after becoming compliant to mandatory disclosure, as evidenced by the much lower values of acquisitions made by ExEGCs.

3.4. Fundraising sensitivity to the LAF rule

If EGCs intend to evade mandatory disclosure costs imposed by the LAF regulation, we should see evidence of a drop in equity issuance, and possible replacement of equity with debt financing, as their float nears the LAF cutoff. To investigate this, we plot the distribution of fundraising by firms around the LAF cutoff in Figure 3. Panel (a) shows a local polynomial regression plot of equity and debt issuance by firms that went public as an EGC against their float. Equity issuance (*New Equity*) is positively related to the float up to $500 million, but then drops steeply until the LAF cutoff, and picks up once again after the cutoff. We also examine *Net Equity Issuance*, defined as the difference between *New Equity* and *Purchased Equity* in a given year. *Net Equity Issuance* drops more steeply relative to equity issuance just before the cutoff, but is flatter beyond the cutoff. These findings indicate that EGCs are comfortable raising follow-on equity for as long as their float remains well below the cutoff. However, to avoid losing exemptions, EGCs issue less equity and repurchase shares as their float nears the LAF cutoff. On the contrary, debt issuance exhibits a jump just before the cutoff, suggesting that EGC firms that face a threat of exemption loss are partially substituting equity with debt financing.

--- Figure 3 ---

Panel (b) shows plots of equity and debt issuance for our placebo sample of NonEGC firms, that is, firms which went public before the JOBS Act. There is no major difference in equity and debt issuance among NonEGCs in the neighbourhood of the cutoff ($500m, $900m), implying that they are not affected as much by the LAF rule. This is not surprising as NonEGC firms with a float exceeding $250 million are automatically classified as "accelerated filers" subject to strict disclosure. A subsequent transition to LAF status is unlikely to cause a major rise in the disclosure requirements of these firms.

Together, these results establish that equity raising by EGCs is sensitive to the float, especially near the LAF cutoff. Besides repurchasing shares, EGCs also attempt to stay below the cutoff and prolong the disclosure exemptions available to them by issuing less equity.

4. Results

4.1. Equity and Debt Issuance

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4.1.1. Main Results

Figure 4 visualizes the fuzzy RD design based on equations (2.2). To isolate the effects of mandatory disclosure on fundraising by EGC firms as precisely as possible, we focus on a restricted sample of firms with float between $350 and $1050 million (i.e., within $350 million on either side of the LAF cutoff). This effectively allows us to compare the treatment effect β_1 between EGC and ExEGC firms while minimizing confounding biases.

Each plot in Figure 4 relates a firm's annual equity issuance to its float. The left-hand plots compare equity issuance among EGC and ExEGC firms, while the right-hand plots show the same for a placebo sample of NonEGCs. Local linear regressions are fit on either side of the LAF cutoff in each plot. Comparison of the plots indicates that EGCs raise considerably more equity (in dollar terms) than NonEGC firms. The first left-hand plot shows that equity raised (in dollars) among ExEGCs rises with a sharp discontinuity at the cutoff compared to EGCs that stay exempt. The right plot shows no such discontinuity among NonEGCs. Plot (b) shows the corresponding graphs of equity issuance scaled by lagged assets. There is a small discontinuous rise in scaled equity issuance among ExEGC firms, but not among NonEGCs.

Figure 5 plots debt issuance versus float for the firms in our sample. The value of debt raised per year is comparable across EGC and NonEGC firms, both in absolute terms and when scaled by lagged assets. This suggests that debt issuance rises sharply when firms become ExEGCs.

--- Figures 4 and 5 ---

Table 2 presents RD estimates of the change in equity and debt issuance when EGCs move from being exempt to mandatorily disclosing under the LAF rule. Equity issuance is measured in two ways: the natural log of one plus *New Equity* (models 1–4) and *New Equity* scaled by lagged total assets (models 5–8). Similarly, debt issuance is measured as the natural log of one plus *New Debt* (models 9–12) and *New Debt* scaled by lagged total assets (models 13–16). We use a narrow bandwidth *h*, chosen using the *rdbwselect* Stata command that identifies an optimal bandwidth with the least mean squared error for a given sample (Calonico, Cattaneo and Farrell, 2018; Calonico, Cattaneo, Farrell and Titiunik, 2017).[32] This procedure yields an

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[32] We use heteroskedasticity-robust standard errors and a triangular kernel, which weights the data by its distance to the cutoff within the selected bandwidth.

optimal bandwidth range of \$250 to \$350 million. For robustness, our analysis uses the smallest bandwidth in this range: \$250 million.[33] The first two regression results under each outcome of interest are OLS estimates. All our specifications include year and industry (SIC) fixed effects, and a flexible functional form of the float.

The coefficient of *ExEGC* in model 1 is positive and significant ($p < 0.001$). In model 2, we control for several firm characteristics. These include lagged total assets and headcount as proxies for firm size, lagged debt-to-assets ratio as proxy for balance sheet risk, cash by lagged assets to proxy the firm's ability to meet short-term obligations, lagged capex and R&D expenses, scaled by assets, to proxy investment intensity and riskiness of the firm, firm age, and Tobin's *q* as a proxy for growth opportunities. We also control for stock market conditions using the lagged mean twelve-month buy and hold return on all Nasdaq stocks (*Stock Market Return*) and a dummy representing hot (cold) IPO market conditions (*Hot SPO Market*). The coefficient of *ExEGC* remains significant even after inclusion of these controls.

--- Table 2 ---

It is likely that EGCs will manipulate their float in an attempt to stay below the LAF cutoff. If this is true, the OLS estimates will underestimate the true effect of EGC status loss because they cannot distinguish between EGCs that did, or did not, avoid compliance with the LAF regulation. We address this concern using the IV method described in equations (2.1) and (2.2), where the loss of EGC status (*ExEGC*) is instrumented with a *PF700* dummy denoting whether the firm's float six months prior exceeded \$700 million. Models 3 and 4 present the IV estimates for *Log (New Equity).* The first stage is estimated using a linear probability model. The partial *F*-statistic has a minimum value of 27.1, implying strong instrument choice. The instrumented *ExEGC* has much smaller coefficients than the OLS results, which are statistically insignificant. The difference between the OLS and IV estimates confirm empirically that while EGCs continue to raise equity even after becoming fully reporting companies, many manage to remain exempt by curtailing equity issuance and by manipulating their float.

The results are quite similar when equity issuance is measured as *New Equity* scaled by lagged assets (models 5–8). The OLS estimates show a 30.1% increase in equity raised by EGC

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[33] Additional robustness tests using larger bandwidths of \$300 and \$350 million are available in Table A4 in the online appendix.

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firms after they move to a mandatory setting. Contrastingly, the IV estimates point to a drop of 14% in equity issuance among EGCs undergoing this transition, but are not significant. For the median EGC with $116 million in assets, the IV estimates indicate a drop of $16.2 million in equity issuance following loss of disclosure exemptions. This conflicting evidence provides further proof of manipulation of the float by EGC firms.

There is also a marked difference in debt issuance among EGCs around the cutoff. OLS results in models 9 and 10 suggest that EGCs raise more debt after transitioning to full disclosure. The corresponding IV estimates in models 11 and 12 show that the increase in debt issuance is, in fact, much greater. These findings are robust to alternate measures of debt issuance scaled by lagged assets (models 13–16). Specifically, the coefficient of *ExEGC* in model 15 suggests that debt issuance increases by 39.5 million for the median EGC with $116 million in assets after it switches to mandatory disclosure.

Overall, our analysis shows strong evidence that EGCs anticipating loss of exemptions take steps to evade compliance with the LAF regulation. These steps aimed at reducing the float include share repurchases and the increased use of debt capital for corporate activities.

4.1.2. Within-Firm Analysis

The results thus far have shown that EGC firms raise more equity than NonEGCs, but tend to rely marginally on debt financing when faced with the risk of moving towards mandatory disclosure. However, one could still be concerned that these cross-sectional estimates do not fully capture the causal effects of the LAF regulation on fundraising by EGC firms. One reason is that comparing outcomes on either side of the cutoff within a narrow bandwidth *h* does not fully account for changes in fundraising by a firm whose float is consistently on one side of the cutoff. It is also unclear how quickly EGCs move to take advantage of their exemptions and raise more funds, especially public equity, while being free from full disclosure.

This section addresses these concerns by measuring changes in equity and debt issuance among EGC firms that transition towards becoming ExEGCs in the years following their IPO. These estimates control for various firm and market characteristics, thus minimizing the chances that our results are driven by omitted variable bias.

The left-hand plot in Figure 6(a) shows the fraction of firms raising equity during the first

six years of going public as an EGC. This fraction rises from 35% in the first year to a peak of 44% in the following year. It then begins to fall steeply in the years thereafter, reaching a low of 20% by year six. The right-hand plot in Figure 6(a) shows the fraction of firms raising debt each year after going public as an EGC. This trend is more stable than for equity raised by the same firms. It drops from 38% during the IPO year to 33% by year one, rising gradually thereafter to 43% by year five.[34]These plots provide preliminary evidence that firms going public under EGC treatment raise equity more frequently during their first two years as a public company, whereas their debt issuance increases only slightly from year three onwards.[35]

--- Figure 6 ---

We formally test the relation between EGC status and fundraising over time by running OLS panel estimates on the full sample (h=$350 million) with industry-year fixed effects and firm-clustered standard errors. To understand the fundraising pattern among EGCs conditional on their disclosure status, we construct individual age dummies for each year the firm has been a public company. All specifications include industry-year fixed effects. We do not include firm fixed effects as age is correlated with firm and year fixed effects. Models 1–3 in Table 3 present regressions of a dummy denoting equity issuance in a given year on the individual age dummies (with the IPO year serving as the omitted base variable), a dummy indicating whether the firm is no longer an EGC (*ExEGC*), interactions between the age dummies and *ExEGC*, and relevant control variables. Models 2 and 3 add several firm characteristics including size (assets) up to the quadratic polynomial. Model 3 also controls for stock market and macroeconomic factors.

--- Table 3 ---

The constant term in model 1 suggests that 42.6% of EGCs raised follow-on public equity in the same year that they went public. From this base of 42.6%, the estimated probability of raising equity remains steady for the first year, but then drops by up to 33.7% by year three in model 3. The standard errors rise considerably during later years, possibly due to a drop in

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[34] Figure A5(a) in the online appendix shows that the trend is much lower among NonEGC firms, as only up to 15% of them raise equity in any given year. Figure A5(b) in the appendix shows that debt raising among NonEGCs increases more steadily, starting with 35% of them raising debt in the IPO year and up to 47% by year ten.

[35] Note that the plots in panel (a) of Figure 6 merely plot raw means from an unbalanced panel of firms that went public under EGC treatment. The distribution of these firms in the sample changes over time, and no correction is made in the plots for changes in firm characteristics such as size and EGC status.

observations as many EGCs in our sample have lower listing age since they went public several years after the JOBS Act took effect. Consistent with the findings in Table 2, *ExEGC* is positive with a minimum of 2.5% (model 3). Interaction terms between *ExEGC* and the year dummies show that equity issuance is marginally higher among ExEGCs, but not statistically significant except in year three. For better interpretation, we plot the coefficients of these interaction terms in the left-hand plot in Figure 6(b). Firms under EGC status are most likely to issue equity within the first two years of going public. Equity issuance drops afterwards and generally remains low, possibly because some EGCs try to stay below the LAF limit and prolong their exemption period. The propensity to raise equity is slightly higher among ExEGCs, possibly because of their greater financing needs (most of them are high-q firms at IPO) and also because mandatory disclosure is known to lower the cost of capital (Jensen and Meckling, 1976).

Models 4–6 in Table 3(b) present the OLS estimates for debt issuance. The interaction terms between *ExEGC* and individual year dummies suggest that the propensity to raise debt by listing age is not very different among EGC and ExEGC firms until year four. In subsequent years, debt issuance drops among EGCs but increases among ExEGCs. These results corroborate our earlier findings that EGCs raise more debt after they become mandatorily disclosing. This pattern emerges only a few years after the IPO when the firm is most likely no longer an EGC and is also possibly less debt-constrained. Plotted coefficients of the interaction terms in the right-hand plot in Figure 6(b) confirm our interpretations.[36]

4.2. Investments

In addition to impacting fundraising decisions, changes in disclosure obligations can influence investment policy. This is an important question to investigate because a sudden change in compliance will likely divert managerial attention away from new investment towards fulfilling reporting duties and quarterly targets. The increased burden to being public under LAF requirements could therefore impact significantly on the investment policy of EGC firms. We expect these effects in both the internal and external investments pursued by EGC firms, and investigate these separately.

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[36] As a robustness check, we run the analysis for smaller bandwidths of the float (h) ranging from $150 to $300 million. These estimates are consistent with our main results in Table 3, and are presented in Table A5.

4.2.1. Internal Investments

    We consider four types of internal investments: capital expenditure (*Capex*), investments in property, plant, and equipment (*PPE*), R&D expenditure (*R&D*), and number of employees (*Employees*).[37] Each measure is standardized by lagged total sales. Missing values are replaced by zero to prevent a reduction in sample size. Table 4(a) reports the regression estimates for equations (1) and (2) for each of these investment measures. The OLS coefficients of *ExEGC* are generally negative except for R&D but are not significant. The IV estimates are however significant up to the 1% level. Causal inference of the IV estimates suggests that capital expenditure drops by 19% and R&D by 14% when the EGC moves from being exempt to a mandatory disclosure setting. Investments in PPE and employees also experience a drop upon the firm's move to ExEGC status. The drop in internal investments shows that ExEGCs tend to focus more on assets in place and innovate less than EGCs.

<div align="center">--- Table 4 ---</div>

    We next investigate whether changes in disclosure requirements affect how EGCs allocate capital to their various investment activities. This is an important question as prior literature notes that better disclosure improves external monitoring by investors and thus leads to greater investment efficiency (Cho, 2015; Francis, Huang, Khurana and Pereira, 2009; Leuz and Wysocki, 2016). To investigate this question, we regress the one-year forward change in each scaled investment measure on *ExEGC*, log dollar values of equity and debt issuance (lagged), and their interaction terms. Each specification includes the usual set of controls along with industry and year fixed effects, and firm-clustered standard errors. The results are reported in Table 4(b). Coefficients of equity issuance are all negative and highly significant in the IV estimations. Contrastingly, the interaction terms between equity issuance and ExEGC have positive and significant coefficients. These results imply that EGCs are less likely to use equity to finance investments in physical assets, R&D, or hiring while they remain exempt. In comparison, debt has a much weaker positive effect on capex when the EGC is exempt from the disclosure burden. This could be because EGCs are credit-constrained as they have fewer assets that can be used as collateral, have less cash, and are less profitable when operating under less disclosure (see Table 1). At the same time, disclosure-exempt access to public equity

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[37] Number of employees is expressed in millions to make it convenient for scaling by lagged total sales.

markets may reduce an EGC's dependence on debt to fund its investment policy. The non-use of debt to fund R&D is consistent with prior literature which states that innovation, especially in younger firms, is financed mainly with equity (Brown, Fazzari and Petersen, 2009). Debt issuance has a negative, but insignificant, effect on hiring. This is in line with available literature which states that debt leads to a reduction in employment and wages (Hanka, 1998).

4.2.2. External Investments

An important consequence of the disclosure relief granted by the JOBS Act is that EGC firms are associated with a high degree of information asymmetry and greater post-IPO share price volatility (Barth, Landsman and Taylor, 2017). A greater uncertainty over the true value of the firm raises prospects that the firm may be overvalued (Purnanandam and Swaminathan, 2004). Overvaluation incentivizes managers to pursue acquisitions, mainly since an overvalued stock lowers takeover costs and impedes the market's ability to value potential synergies from such deals (Shleifer and Vishny, 2003).

These facts suggest a connection between firm-level disclosure and the willingness to pursue acquisitions. While regulatory concessions under the JOBS Act should encourage stronger acquisition activity among EGCs, this trend is likely to reverse following their move to a mandatory regime. The resulting administrative burden could also shift managerial attention towards compliance and governance, while also diverting resources away from acquisitions, which are often riskier and complex to assess than internal investments. The rise in disclosure costs following loss of EGC status is thus likely to impose restrictions on firms' resources and their appetite for risk, forcing managers to pursue fewer acquisitions.

Results in Table 5 confirm this hypothesis. We use three proxies to capture the acquisition activity each year: a dummy indicating if the firm made at least one acquisition (*Acquisition*), the log dollar value of acquisitions (*Acquisition Value*), and a dummy equal to one if all acquisitions are paid for entirely in cash (*All Cash Acquisitions*). The regressions include our usual set of controls and industry/year fixed effects, with firm-clustered standard errors.

--- Table 5 ---

Both the OLS and IV results in part (a) show significant decline in acquisition activity following loss of EGC status. Coefficients of *ExEGC* in the IV regressions are all significant

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below the 1% level. The IV estimates in model 2 indicate that the mean EGC firm is 18% less likely to acquire after its transition to mandatory disclosure.[38] Models 3–4 show a corresponding drop in the aggregate dollar value of acquisitions. This decline is however not economically significant. Further, model 6 shows that firms are 15% less likely to choose cash as a payment method to acquire, conditional on EGC status loss. Prior literature notes that cash enables quicker deal completion, eases bidding competition, and lowers the risk of bid rejection by the target management (Fishman, 1989). Using stock as acquisition currency is likely to increase deal uncertainty, and cause substantial delays due to stock registration and shareholder approval requirements (Gilson and Black, 1995). It follows that EGCs prefer cash as a payment method for acquisitions because it allows them to mitigate these frictions and be competitive. Given that EGC firms are associated with high stock price volatility (Barth, Landsman and Taylor, 2017), using cash to pay for acquisitions is also consistent with their demand for greater uncertainty aversion.

Table 5(b) investigates whether our sample firms time their fundraising to coincide with periods of acquisition activity. We find no significant relation between funds raised in a given year and subsequent acquisition activity of EGC firms.[39] In contrast, ExEGCs raise cash via SPOs at least to partly fund acquisitions. These results suggest that strict disclosure enhances transparency, and therefore creates stronger incentives for firm managers to allocate their capital more efficiently. Another contributing factor is that it is much cheaper and easier for firms to raise equity when operating under full disclosure.[40] Debt, on the other hand, does not appear to have any comparative influence on the acquisition activity of EGC firms.

4.3. Growth Opportunities and Firm Value

To the extent that disclosure serves as a monitoring mechanism, a drop in disclosure quality

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[38] In unreported analysis, we run logit regressions on our dichotomous dependent variables *Acquisition* and *All Cash Acquisitions*, and obtain similar results. These are available upon request.

[39] One might argue that the cash used as acquisition currency is raised many years in advance at the IPO and in subsequent SPOs. We find no evidence to this effect in unreported analysis among the firms in our sample.

[40] Panel A, part (c) of Table A3 in the appendix offers descriptive evidence to support this hypothesis. The mean fees levied by underwriters of SPOs drop from 2.71% (relative to offer size) for EGC firms to 1.7% for ExEGCs. Similarly, money left on the table by an issuer when conducting an SPO (underpricing) is 7.7% of offer size among EGCs, but only 3.6% among ExEGC firms. These statistics suggest a significant drop in equity issuance costs following an EGC's transition to full disclosure status.

could incentivize managers to make suboptimal, self-maximizing decisions. These decisions could include suboptimal investments that reduce operating performance and firm value. Managers make such decisions because investors cannot properly link managerial decisions to firm performance or value when disclosure quality is low (Hope and Thomas, 2008).

It follows that a switch to mandatory disclosure should improve investors' ability to monitor managerial actions, leading to better recognition of growth opportunities and an overall improvement in firm value. Relatedly, the drop in internal and external investments upon EGC status loss signals a shift in managerial focus towards exploiting assets in place and achieving better efficiency, resulting in valuation benefits from full disclosure.

Figure 7 confirms that this is indeed the case. Panel (a) shows the non-parametric relation between growth opportunities, proxied by Tobin's q, and *Listing Age*. The relation is negative in the case of EGCs but is rather flat among ExEGC firms. These relations hold even after we control for firm characteristics and compute residuals from an OLS regression of Tobin's q on *ExEGC*, firm-level controls, and industry-year fixed effects. The non-parametric relation between the residuals and listing age is negative only in the case of EGC firms.

--- Figure 7 ---

To empirically test the relationship between EGC status and Tobin's q, we run OLS and IV panel regressions that include the logarithm of listing age, *Log (Listing Age)*, and an interaction term between *ExEGC* and *Log (Listing Age)* as regressors. These regressions control for industry-year fixed effects with firm-clustered standard errors. Note that since age is collinear with both year and firm fixed effects, the latter are not included (Loderer, Stulz and Waelchli, 2017). The results are reported in Panel A of Table 6.[41] Models 1–2 show that the Tobin's q ratios of ExEGCs are significantly higher than for EGC firms. The higher Tobin's q is consistent with investors perceiving managers of ExEGC firms to make more value-adding decisions than their exempt EGC peers. *Log (Listing Age)* has positive coefficients but is not significant. Lastly, the interaction term between *ExEGC* and *Log (Listing Age)* are negative

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[41] Note that since we include firm size (logarithm of total assets) as a control variable, our results do not indicate declining returns to scale. Using alternative proxies for firm size, such as logarithm of total sales, yield consistent results. In unreported analysis, we obtain qualitatively similar results when using an alternative age measure proposed by Pástor and Veronesi (2003), namely, $\frac{-1}{(1+\text{Listing Age})}$.

and significant at the 5% level. This suggests that managers of firms subject to greater disclosure obligations tend to devote more efforts to existing assets, leading to only a marginal drop in their Tobin's q over time. Once again, the OLS coefficients are smaller in magnitude than the IV estimates, consistent with EGC firms' efforts to remain below the LAF threshold.

--- Table 6 ---

A puzzling implication of the relation between EGC status and Tobin's q is that disclosure-exempt firms are unable to sustain their initial success, despite the fact that they tend to invest relatively more in R&D and in buying other companies and technologies. We follow Loderer, Stulz and Waelchli (2017) and use a slightly different approach to shed light on this phenomenon. First, to eliminate common effects, we regress q on firm size as well as industry and year fixed effects to estimate the residuals. We then compare this residual q against the residual q in year zero when the firm went public (denoted q_o). Panel (b) of Figure 7 plots the fraction of firms that exceed q_o as a function of listing age and EGC status. Very few EGC firms have managed to exceed q_o after year two. By age four, only 46% of EGCs have a Tobin's q exceeding q_o. In line with previous findings, the fraction of ExEGCs with a q larger than q_o is always higher than that of EGC firms. Panel B of Table 6 presents formal analysis of firms' ability to renew their initial success at creating value. The dependent variable is a dummy equal to one if the Tobin's q of the firm exceeds q_o, and zero otherwise. Both regressions include our usual set of controls, industry-year fixed effects, and firm-clustered standard errors. The evidence shows that ExEGCs have a greater propensity to revert to initial success q_o compared to their exempt peers. However, this propensity declines with listing age.

4.3.1. Which Factors Affect Growth Opportunities?

So far, we have argued that EGC firms are less capable of renewing growth opportunities (known to outside investors) as long as they remain exempt from full disclosure. Panel (a) of Table 7 considers both equity and debt issuance and investigates how the raising of these funds impacts the growth opportunities of a firm conditional on its status as an EGC or ExEGC.

Model 1 shows a positive relation between equity raised by the firm in a given year and its Tobin's q in the following year. Debt has a negative effect on Tobin's q. However, neither effect is statistically significant. In model 2, we interact measures of equity and debt issuance

with the *ExEGC* dummy. Coefficients of the main terms representing equity and debt issuance are negative, implying that fundraising under reduced disclosure is associated with the lower Tobin's q. On the other hand, the interactions suggest that equity raised by ExEGCs contributes to a marginally higher Tobin's q, whereas debt has no significant marginal effect on firm growth. The corresponding IV estimates in models 3 and 4 are qualitatively similar. Marginal effects analysis of model 4 suggests that a one standard deviation increase in equity issuance leads to a rise of 1.81 in the Tobin's q of an ExEGC the following year compared to a similar EGC firm. A one standard deviation increase in debt leads to a marginal increase of only 0.85 in the Tobin's q of an ExEGC next year relative to a similar EGC peer.

Together, these results highlight that funds raised are negatively related to firm value for EGCs as opposed to ExEGCs. The public equity raised by an EGC is most likely done under the disclosure and compliance provisions of the JOBS Act, which potentially reduce the scope and credibility of information revealed to investors at the time of the issue. This makes it difficult for investors to monitor the use of proceeds or determine their contribution to the growth of the firm, thereby creating the perception that equity raised by an EGC is rather value-reducing compared with ExEGCs. These arguments are justified by the fact that equity issuance is positively related to next year's Tobin's q among ExEGCs. Moreover, our earlier analysis showed that firms tend to exploit their existing assets rather than pursue new investment opportunities after they become an ExEGC (See Table 6). Investors should therefore expect ExEGCs to better utilize the equity raised through an SPO compared to their exempt EGC peers, as reflected in their different Tobin's q ratios.[42] The negative relation between debt and Tobin's q of an EGC is consistent with the market facing difficulties in linking the use of debt proceeds to future performance and growth when the firm is making fewer financial disclosures. Thus, even if EGCs were to turn to private debt markets with the intent to avoid revealing firm-specific information via public disclosures, our results show that this has adverse consequences in the form of an overall reduction in firm valuation.

--- Table 7 ---

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[42] Note that these differences in investor beliefs are also evident in the costs levied on equity and debt issuance conditional on the firm's disclosure. Panel (c) of Table A3 in the online appendix shows that the cost of raising either equity or debt reduces when the EGC moves into the mandatory regime.

Although the above results improve our understanding of how disclosure affects firm value through the external financing channel, they do not capture the specific investment channels that influence the growth opportunities of a firm. We posit that an increase in capital spending will positively affect firm value depending on the market's ability to assess investment opportunities based on financial disclosures made by the firm (proxied by EGC status). Panel (b) of Table 7 explores which investment policies affect the market's assessment of future growth opportunities, as proxied by Tobin's q. Models 1–3 consider internal investments made by firms (capex, PPE, and R&D, all scaled by lagged sales). Models 4–6 cover external investments made in the form of acquisitions. We find that internal investments exert a negative impact on Tobin's q among EGC firms, which is not significant. The effect reverses in the case of capex and PPE, but not R&D, once an EGC becomes fully disclosing. This evidence is consistent with future benefits produced by investments in R&D being more uncertain than those made in capex/PPE (Kothari, Laguerre and Leone, 2002).

Surprisingly, acquisitions have the opposite effect on Tobin's q. We find that acquisitions made by EGC firms have a positive impact on Tobin's q. This positive reaction is rather counterintuitive as one would expect that acquisitions made under incomplete disclosure would prompt investors to penalize the stock price. However, we hypothesize that a lower disclosure level gives managers more flexibility to overstate the goodwill portion of the purchase price of an acquisition. Moreover, as noted by Shalev (2009), an excess amount allocated to goodwill incentivizes managers to withhold relevant information in order to minimize scrutiny from investors.[43] Together these factors allow managers of the acquiring firm to project better long-term growth prospects from the acquisition and higher future earnings when the disclosure intensity required by law is low.[44]

The interactions between *ExEGC* and the acquisition proxies in models 4–6 confirm these

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[43] Relatedly, Shalev (2009) finds that acquirers make fewer disclosures when they allocate an abnormal portion of the purchase price to goodwill (defined as purchase price minus the net fair value of the acquired assets). Low disclosure allows acquirers to project higher post-acquisition earnings per share by simply allocating a greater portion of the purchase price to goodwill and by lowering the portion allocated to net assets (either by understating assets or overstating liabilities). This allows them to get away with overpaying for acquiring a target company that could eventually be detrimental to shareholder interests.

[44] In fact, we show in online Appendix E that managers of EGC firms have more discretion over managing reported earnings while they are exempt from mandatory disclosure.

interpretations.[45] Coefficients of the interactions are negative and significant up to the 1% level. Thus, another reason why EGCs pursue fewer acquisitions when under mandatory disclosure is because the market is more capable of scrutinizing such transactions under this setting. Our evidence suggests that acquisitions by ExEGCs are deemed by the market to be value-reducing in the long run, resulting in a marginally lower Tobin's q.

4.4. Managerial Effort

The findings thus far have shown that EGCs invest less and focus on better utilization of assets upon losing their exemptions. A natural question arises whether these changes create operational efficiencies due to a shift in managerial attention towards improving the quality of goods and services, lowering costs, and reducing financial constraints. The evidence presented in Table 8 is consistent with these predictions. Holding everything else constant, ExEGCs generate 31% more sales per dollar of invested assets (model 2) and up to 29% higher return on assets (model 4) than EGC firms. There is also a 41% drop in the probability of having net income below zero upon the switch to full disclosure. Lastly, firms are financially less constrained under the mandatory regime (models 7–8). Overall, these results suggest that mandatory disclosure compels managers of EGC firms to redirect efforts from investing to improving profitability and operational efficiency.

--- Table 8 ---

5. Conclusion

This paper explores how mandatory disclosure affects the growth opportunities of firms, taking into account their fundraising and investment behaviour. For this purpose, we focus on firms entering public markets as EGCs under the JOBS Act, which exempts them from disclosure and compliance obligations for a period of up to five years post-IPO. For our analysis, we exploit the fact that an EGC will lose its exemptions and become fully disclosing if its float exceeds $700 million at any time during the five-year period. We investigate how

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[45] Note that since our empirical analysis is at the firm-year level, we do not provide a more direct test of whether EGC managers allocate a greater portion of the purchase price of their acquisitions to goodwill when the firm is exempt from mandatory disclosure under the provisions of the JOBS Act. Such an analysis can only be done at the individual deal level, and is left as an open question for future research.

the financing and investment decisions made by firms during their status as EGCs impact their growth opportunities (proxied by Tobin's *q*) compared to similar decisions made by these firms after they lose exemptions due to the $700 million rule and become ExEGCs.

We find that even though firms invest more in physical assets, innovation, and acquisitions while they are EGCs, they experience a considerable decline in Tobin's *q* as long as they remain exempt from mandatory disclosure. There is substantial improvement in both investment and operational efficiency once these firms lose exemptions and become ExEGCs. This increased efficiency, combined with improved transparency under stricter disclosure, results in better recognition of growth opportunities by outside investors and a corresponding improvement in Tobin's *q*. Our findings highlight that by allowing firms to choose their optimal level of disclosure, the JOBS Act is incentivizing inefficient investments that do not contribute much value to the firm. Supplementary evidence presented in appendices D and E shows that EGCs experience an increase in audit fees and weaker control over earnings after they cease to remain exempt. The increased compliance costs under mandatory disclosure explain, at least in part, why many EGCs attempt to stay below the $700 million threshold by manipulating their float.

Our study informs the longstanding policy debate over the growing regulatory burden that has made it difficult for promising high-growth companies to access capital. The JOBS Act represents the last major deregulation of US capital markets. It seeks to stem the decline in IPOs by unwinding the "regulatory cascade" following the tech bubble and accounting scandals of the early 2000s that imposed high disclosure and compliance costs on firms going public. To the best of our knowledge, ours is the first study to investigate the Act's implications on the valuation and growth opportunities of firms entering public markets under its provisions.

The JOBS Act continues to receive strong political support and press coverage. Recently, the US Congress passed the "JOBS Act 3.0" that extends several Title I provisions including the relaxed disclosure requirements. In light of these developments, our findings raise concerns over such initiatives and question whether lawmakers are pursuing the right policy to spur economic growth by easing the regulatory burden on firms. More research is needed to identify the optimal ways in which disclosure regulation governing US capital markets could be streamlined to facilitate better value creation by firms.

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Figure 1. Do EGCs Manipulate their Float?

Panel (a) visualizes tests for density discontinuity in the float of US companies on the last day of their second fiscal quarter. Firms in the sample had less than $1 billion revenue on the day of their IPO. The running variable *float* is the market value of common equity held by public investors on the last day of the preceding second fiscal quarter. The left-hand plot represents the treatment period between April 6, 2012 and April 30, 2019 in which firms went public as EGCs. The right-hand plot represents the placebo period prior to the JOBS Act (January 1, 2000−April 4, 2012) when IPO firms did not qualify for EGC status. See Section 3.1 for a description of the sample construction. Observations to the right of the vertical cutoff (float ≥ $700 million) imply that the firm becomes a "Large Accelerated Filer" subject to mandatory disclosure requirements under the Securities Act. The manipulation test statistic at the top right corner of each plot is based on local polynomial density estimation from Cattaneo, Jansson and Ma (2019). The *p*-value of the test statistic is shown in parantheses. A statistically significant discontinuity implies possible manipulation of float near the cutoff. Panel (b) visualizes coefficients from probit models that estimate the likelihood that an EGC firm buys back shares to stay below the LAF threshold. The dependent variable in the left-hand plot is a dummy equal to one if an EGC initiates a share buyback program during the six months preceding the last day of the second fiscal quarter. The dependent variable in the right-hand plot is a dummy equal to one if an EGC initiates a share buyback program during the six months following the last day of the second fiscal quarter. The main variable of interest (x-axis) is the firm's float (i) exactly six months before the end of most recent second fiscal quarter (left plot), (ii) on the last day of most recent second fiscal quarter (right plot). In each plot, the x-axis is split into a categorical variable comprising different sub-ranges of the float. Separate regressions are run for each additional year the firm has been a public company (*Listing Age*). Each regression controls for firm size, financial characteristics, stock market conditions, and industry fixed effects. Standard errors are clustered by firm. Regions shaded in blue denote the float range at which an EGC will likely exceed the LAF threshold and lose its exemptions. Vertical bars are 90% confidence intervals.

a) Density tests

EGC firms (at IPO)

Manipulation test statistic: -2.756 (0.006)

NonEGC firms (placebo)

Manipulation test statistic: -0.169 (0.866)
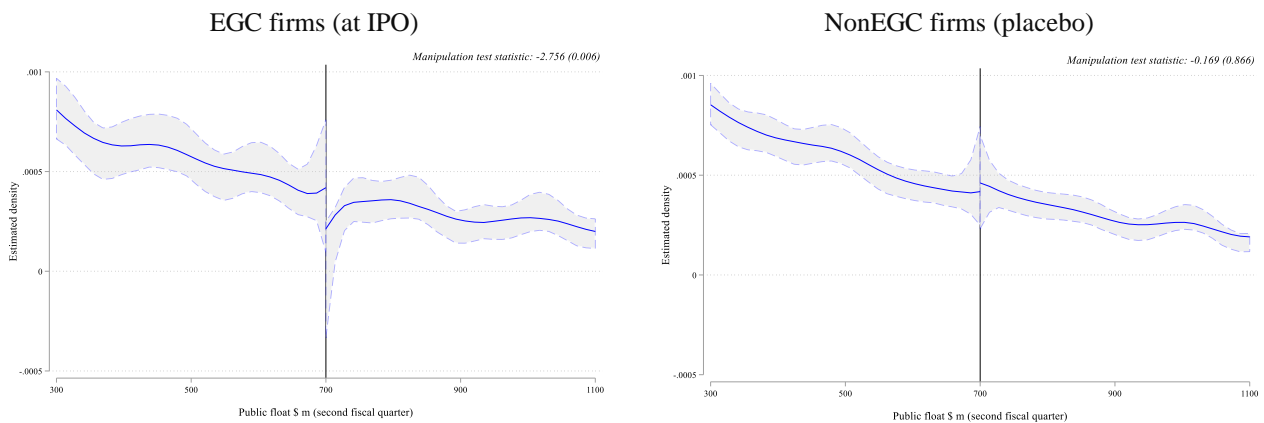
b) Share buybacks by firms going public under EGC treatment

0−6 months before end of 2nd fiscal quarter

0−6 months after end of 2nd fiscal quarter

Listing Age = 2y   Listing Age = 3y   Listing Age = 4y   Listing Age = 5y
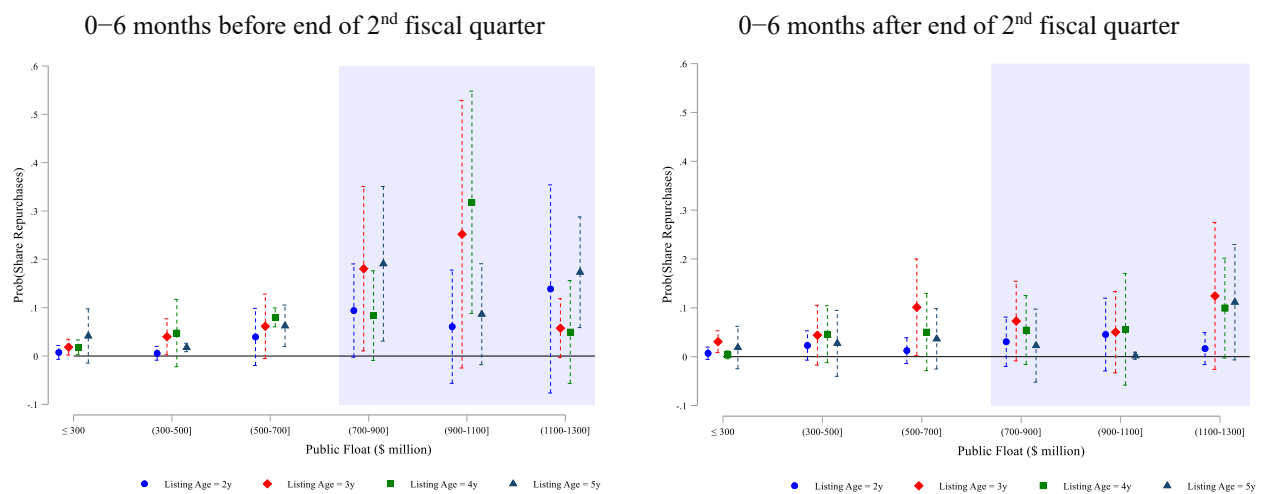
Figure 2. Duration of EGC Status

Panel (a) is a distributional plot of the duration for which EGC firms remain exempt following their IPO. Duration is the period (in quarters) between the IPO date and the date on which the firm loses its EGC exemptions. The plot covers 248 EGC firms that ceased to remain exempt either: (i) upon becoming a "Large Accelerated Filer", or, (ii) upon completing maximum exemption period of five years after the IPO. The sample covers US firms that went public between the period April 6, 2012 and April 30, 2019. See Section 3.1 for a description of the sample construction. Panel (b) presents violin plots of EGC duration for each cohort of US firms grouped by IPO year. Red dots indicate median EGC duration. Panel (c) shows box plots of EGC duration among high-q (Tobin's $q > 1$) and low-q (Tobin's $q \leq 1$) firms that went public as EGCs.

a) All EGC firms
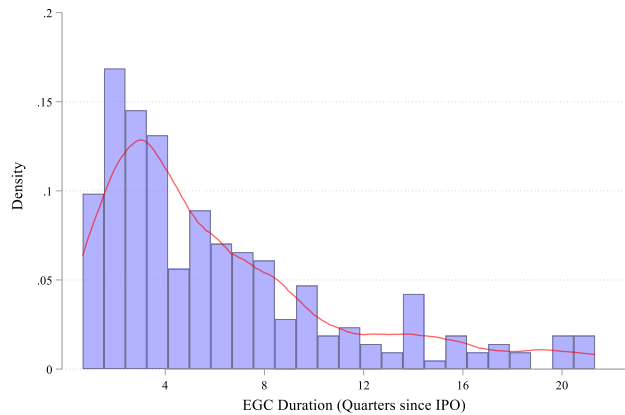
b) By IPO year
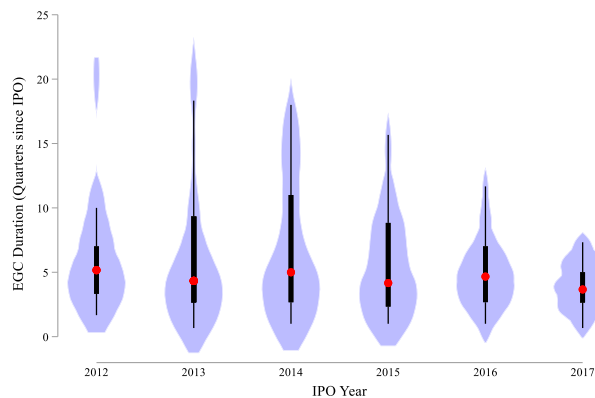
c) High-q versus low-q EGC firms (at IPO)

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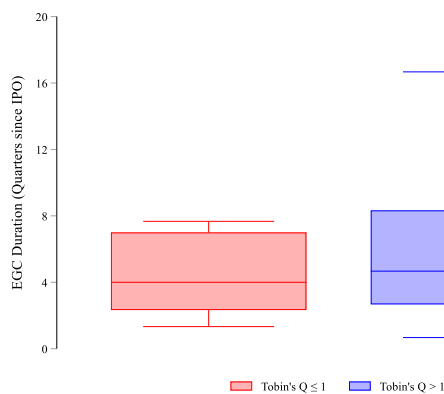
Figure 3. Fundraising Sensitivity to LAF Regulation

Panel (a) shows local polynomial regression plots of equity and debt issuance by US firms that went public as an EGC against their float. Equity issuance (*New Equity*) is measured as the dollar value of common stock issued by the firm via seasoned public offers (SPOs) during a fiscal year. Data on SPOs is collected from Capital IQ, and includes only offers that involve a sale of new primary stock independent of existing shareholders. *Net Equity Issuance* is the difference between *New Equity* and *Purchased Equity* in a given fiscal year. Debt issuance (*New Debt*) by the firm in a given year is the total annual long-term debt issued, and covers bonds, notes, lease obligations, debt reclassifications, and acquisition loans. This variable is computed from Compustat data item DLTIS. Panel (b) presents local polynomial regression plots of equity and debt issuance among firms that went public before the JOBS Act (January 1, 2000−April 4, 2012) and therefore do not quality for EGC treatment during their IPO (*NonEGC firms*). See Section 3.1 for a description of the sample construction. See Table A1 for a description of these variables.

a) EGC firms (at IPO)
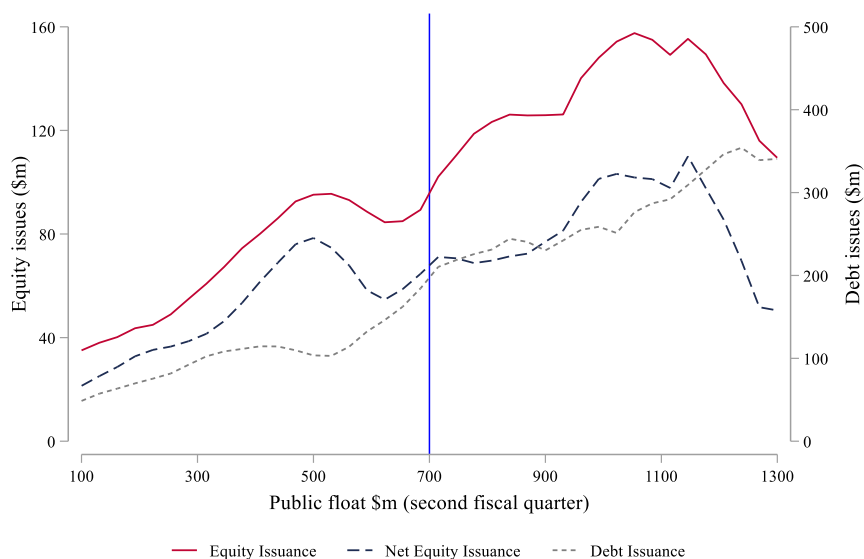
b) NonEGC firms
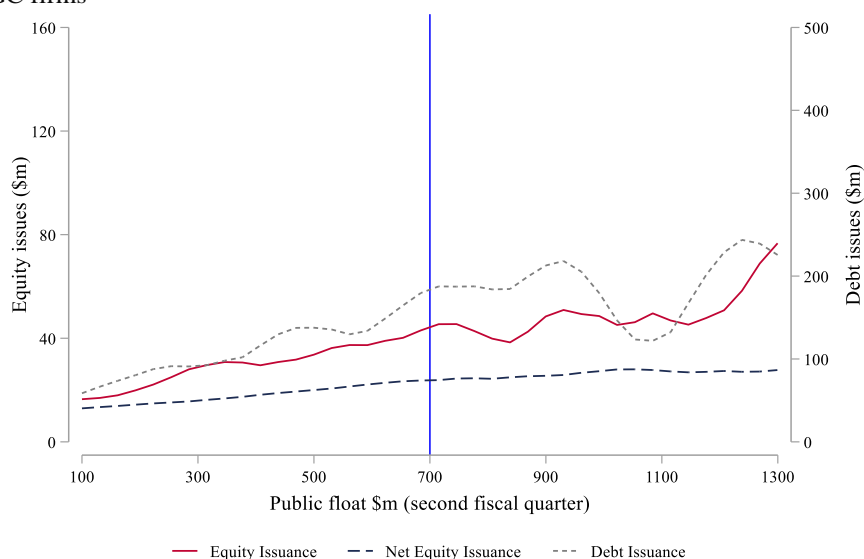
Figure 4. EGC Status and Equity Issuance

Each plot relates a firm's equity issuance per year to its float. The sample comprises firms that went public as an "Emerging Growth Company" between April 6, 2012 and April 30, 2019. See Section 3.1 for a description of the sample construction. In panel (a), the left plot compares equity issuance among EGC and ExEGC firms. *EGC* refers to the firms that have float below $700 million and thus remain exempt from mandatory disclosure under Title I of the JOBS Act. *ExEGC* is a refers to firms that have a float above $700 million, and are thus subject to mandatory disclosure under the "Large Accelerated Filer" (LAF) regulation. The plot on the right shows equity issuance among a placebo sample of NonEGC firms that went public before the JOBS Act (January 1, 2000−April 4, 2012) and thus did not quality for EGC treatment during their IPO. Local linear regressions are fit on either side of the LAF cutoff in each plot, as indicated by the blue lines. Panel (b) shows comparative estimates of equity issuance scaled by lagged assets as a function of float. See Table A1 for a description of these variables.

a) Equity Issuance ($m)
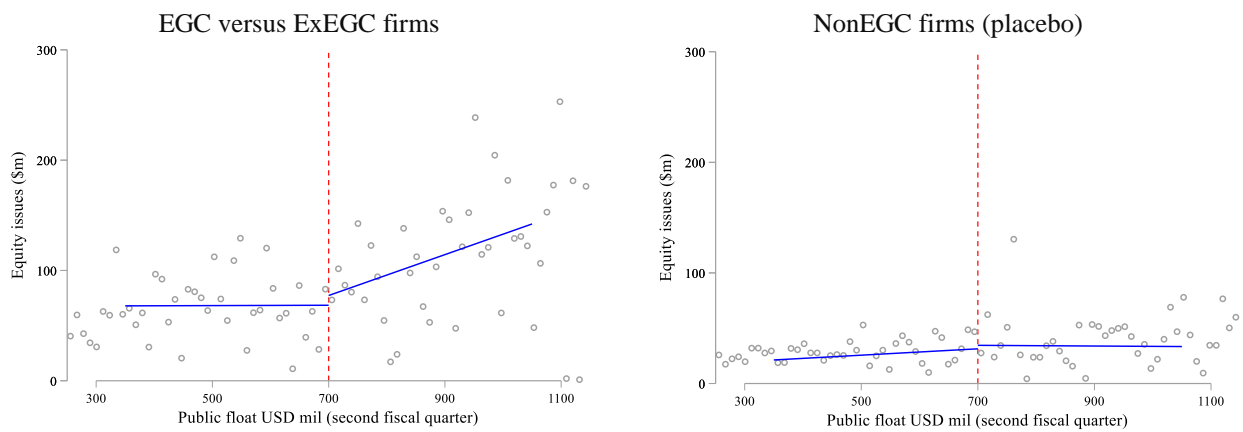
b) Equity issuance by lagged assets

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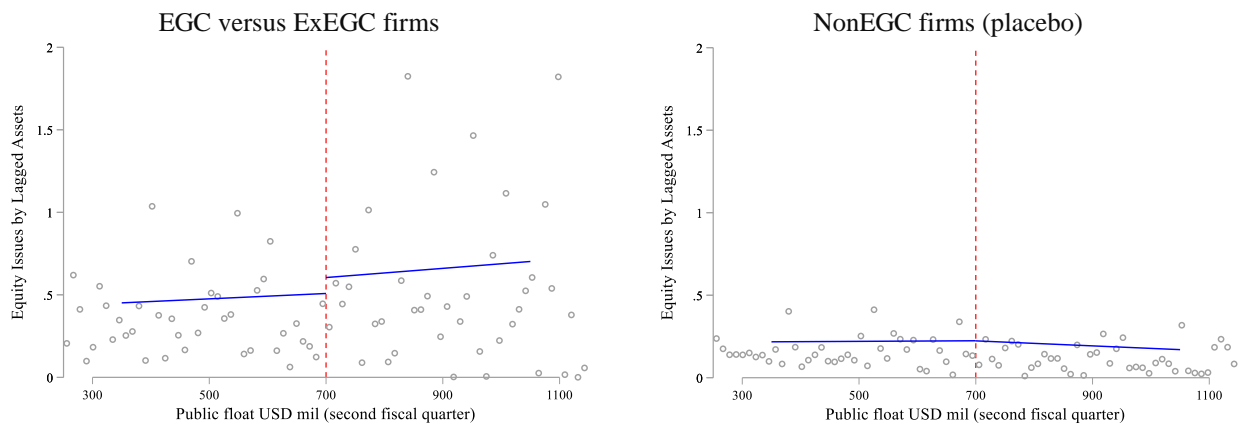
Figure 5. EGC Status and Debt Issuance

Each plot relates a firm's debt issuance per year to its float. The sample comprises firms that went public as an "Emerging Growth Company" between April 6, 2012 and April 30, 2019. See Section 3.1 for a description of the sample construction. In panel (a), the left plot compares debt issuance among EGC and ExEGC firms. *EGC* refers to the firms that have float below $700 million and thus remain exempt from mandatory disclosure under Title I of the JOBS Act. *ExEGC* refers to firms that have a float above $700 million, and are thus subject to mandatory disclosure under the "Large Accelerated Filer" (LAF) regulation. The right-hand plot shows debt issuance among a placebo sample of NonEGC firms that went public before the JOBS Act (January 1, 2000−April 4, 2012) and thus did not quality for EGC treatment during their IPO. Local linear regressions are fit on either side of the LAF cutoff in each plot, as indicated by the blue lines. Panel (b) shows comparative estimates of debt issuance scaled by lagged assets as a function of float. See Table A1 for a description of these variables.

a)   Debt Issuance ($m)
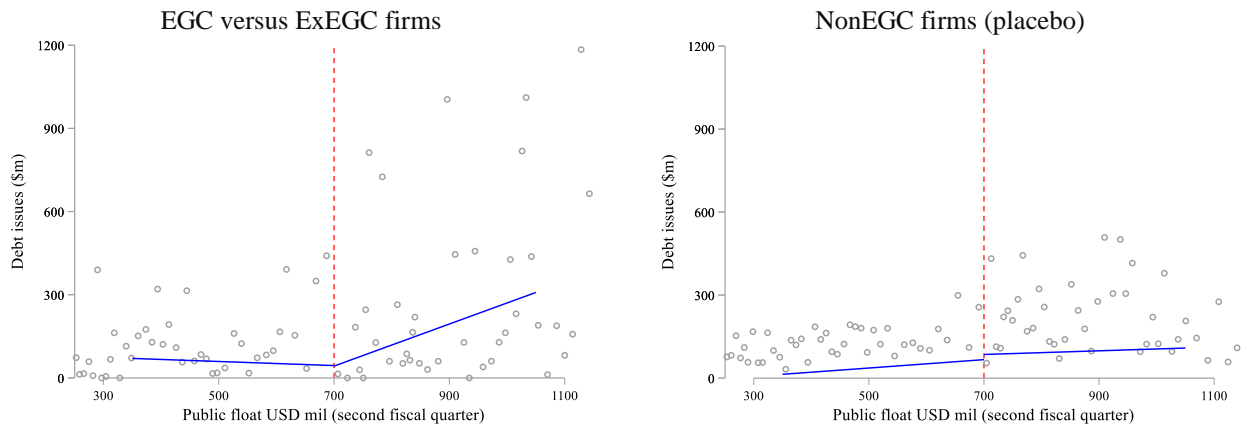
b)   Debt issuance by lagged assets
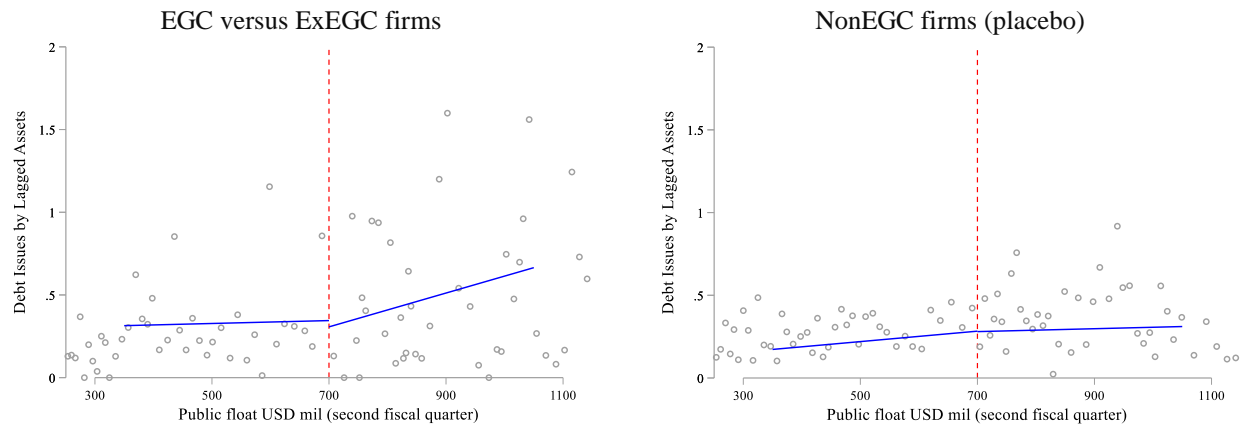
Figure 6. Fraction of Firms Raising Equity and Debt by Listing Age

Panel (a) presents the fraction of firms raising equity and debt during the first six years after their IPO. The sample comprises all firms that went public as an "Emerging Growth Company" (EGC) between April 6, 2012 and April 30, 2019. See Section 3.1 for a description of the sample construction. EGC firms are exempt from mandatory disclosure under Title I of the JOBS Act for a maximum period of five years, unless their float exceeds $700 million at the end of a given second fiscal quarter and qualifies them as a "Large Accelerated Filer" (LAF) subject to full disclosure. Panel (b) presents a visual implementation of the regression estimates for debt and equity issuance reported in panel (b) of Table 3. Each figure displays coefficients of individual year dummies denoting the number of years a firm has been public (blue line), and their interactions with an *ExEGC* dummy (red line). *ExEGC* is equal to one for EGC firms having a float above $700 million that are subject to mandatory disclosure under the LAF regulation, and zero for EGC firms whose float is below the threshold. Vertical bands represent 90% confidence intervals. For this analysis, we restrict the sample to firms whose float is within a bandwidth *h*=$350 million on either side of the LAF cutoff. See Table A1 for a description of these variables.

a) EGC firms (at IPO)
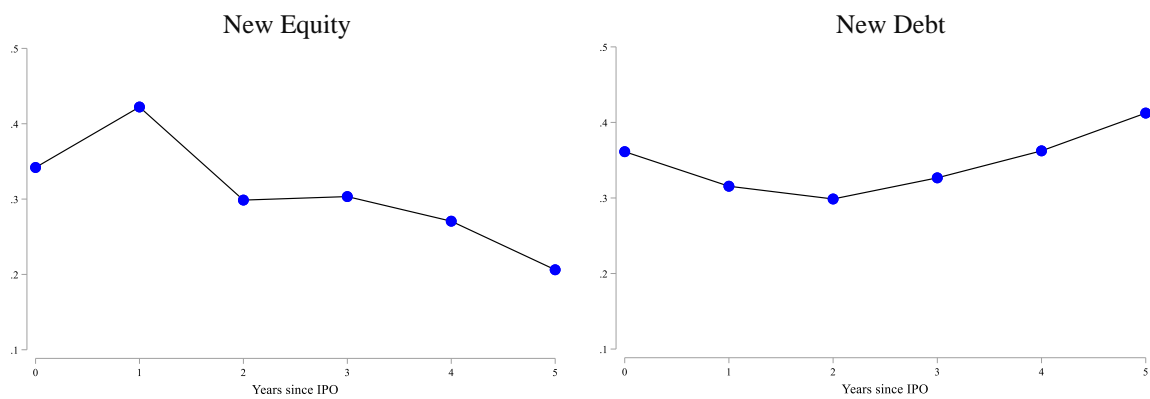
b) EGC versus ExEGC firms (*h*=$350 million)
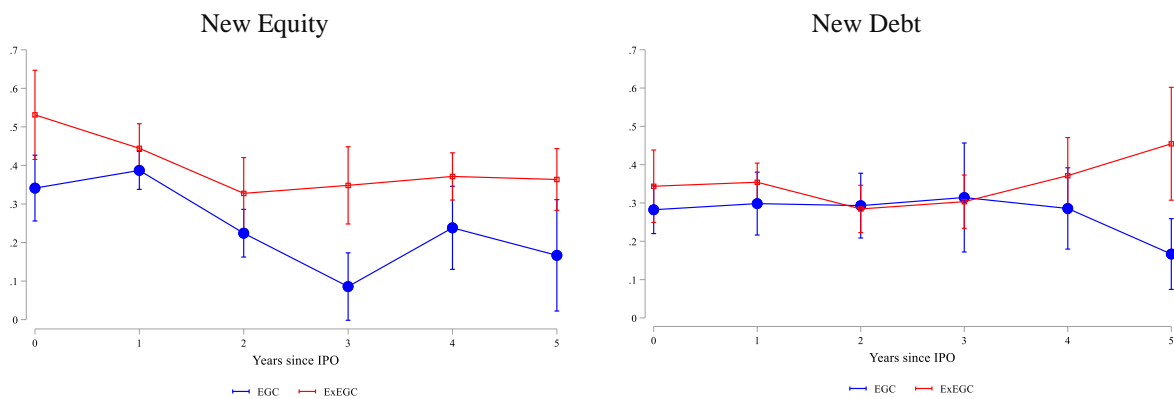
Figure 7. EGC Status and Growth Opportunities

The sample used for the plots comprises firms that went public as an "Emerging Growth Company" (EGC) between April 6, 2012 and April 30, 2019, and have a float between $350 million and $1,050 million in any given year. See Section 3.1 for a description of the sample construction. The left-hand figure in panel (a) shows the non-parametric relation between growth opportunities, proxied by Tobin's q, and *ExEGC*. The variable *ExEGC* is a dummy equal to one for firms having a float above $700 million that are subject to mandatory disclosure under the "Large Accelerated Filer" (LAF) regulation, and zero for firms whose float is below the threshold. The right-hand figure in panel (a) plots the residuals from an OLS regression of Tobin's q on the *ExEGC* dummy, firm-level controls, and industry-year fixed effects. Panel (b) plots the fraction of firms whose Tobin's q exceeds q_0 (Tobin's q in the IPO year) as a function of *Listing Age* and EGC status (*ExEGC*). *Listing Age* is the number of years since the firm went public. To estimate these fractions, we follow Loderer, Stulz and Waelchli (2017) and regress Tobin's q on firm size as well as industry and year fixed effects to estimate the residuals q's. We then compute the fraction of firms whose residual q exceeds their respective residual q_0. See Table A1 for a description of these variables.

a) Tobin's q and listing age
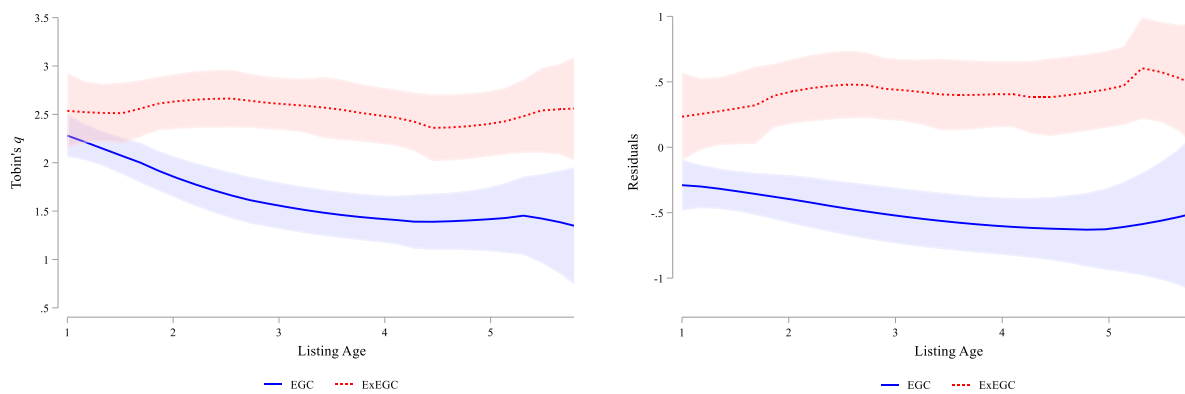
b) Likelihood of regenerating growth opportunities

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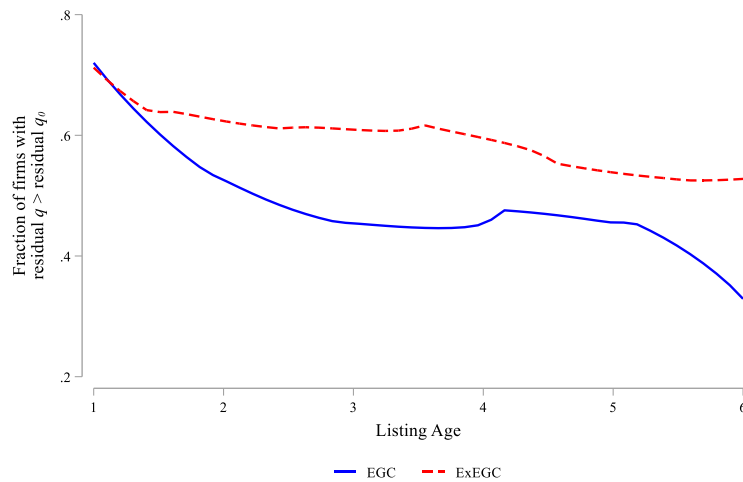
Table 1. Summary Statistics: All Firms

Table shows summary statistics for all US firms that went public as an "Emerging Growth Company" (EGC) between April 6, 2012 and April 30, 2019. See Section 3.1 for a description of the sample construction. Panel A reports summary statistics on all sample firms that have a float below $700 million and are exempt as EGCs from mandatory disclosure under Title I of the JOBS Act. Panel B reports summary statistics on all sample firms that no longer qualify as EGCs on account of having a float above $700 million that subjects them to mandatory disclosure under the "Large Accelerated Filer" (LAF) regulation. Wherever applicable, total assets (TA) in the denominator are lagged by one year with respect to the numerator. See Table A1 for a description of these variables. ***, **, and * denote significance at the 1%, 5%, and 10% level, respectively.

	Panel A: EGC firms			Panel B: ExEGC firms			Difference in means
	Mean	SD	Median	Mean	SD	Median	
Number of Fiscal Quarters as EGC	-	-	-	8.47	4.86	8.00	
Float (second fiscal quarter)	861.82	1138.98	440.51	803.05	1100.66	400.76	-58.77
Incorporation Age (years)	13.75	15.01	10.00	12.73	14.33	9.00	-1.02
Firm Characteristics							
Total Assets, TA ($m)	207.57	341.85	115.68	895.70	1442.47	390.56	688.13***
Sales/Revenue ($m)	236.59	396.51	87.50	415.05	600.82	195.67	178.47***
Net Income ($m)	-23.53	93.34	-18.86	10.46	109.91	5.64	33.99***
Employees	2491.22	4452.96	791.00	3011.37	5729.68	1100.00	520.15
Debt/TA	0.18	0.26	0.03	0.21	0.28	0.07	0.03***
Cash/TA	0.33	0.30	0.24	0.27	0.27	0.18	-0.06***
Board Size	12.87	4.33	12.00	13.57	5.20	13.00	0.71***
Board Independence	0.95	0.13	1.00	0.96	0.11	1.00	0.01
New Fundraising							
New Equity ($m)	23.55	55.06	0.00	69.02	165.61	0.00	45.48***
New Debt ($m)	51.31	183.69	0.00	278.36	646.16	0.00	227.05***
Growth Opportunities and Operational Efficiency							
Tobin's Q	1.42	0.86	1.25	1.66	1.11	1.35	0.24***
Sales/Assets	0.59	0.70	0.38	0.84	0.76	0.67	0.26***
ROA	-0.21	0.45	-0.07	-0.01	0.34	0.08	0.20***
Negative NI	0.66	0.47	1.00	0.43	0.50	0.00	-0.22***
Internal Investments							
Capex ($m)	53.04	210.40	3.96	67.55	262.58	8.06	14.51**
Capex/Sales	0.08	0.18	0.01	0.09	0.19	0.03	0.01
PPE	254.63	234.85	14.64	338.07	269.65	33.81	83.44***
PPE/Sales	0.33	0.81	0.03	0.38	0.81	0.09	0.06***
R&D ($m)	25.15	70.43	2.98	20.19	66.38	0.00	-4.96***
R&D/Sales	1.13	4.22	0	0.55	2.56	0.00	-0.58***
External Investments							
Number of acquisitions	1.05	0.22	1.00	1.07	0.26	1.00	0.02
Value of acquisitions ($m)	283.26	729.21	71.39	215.89	610.08	44.75	-67.37
All cash acquisitions (D)	0.73	0.45	1.00	0.79	0.41	1.00	0.06
Observations		867			1101		

Table 2. Impact of EGC Status Loss on Fundraising

Table presents regression discontinuity (RD) estimates where the dependent variables are various measures of issuance. The OLS estimates are based on equation (1); the IV estimates are based on equations (2.1) and (2.2). Models (1) – (4) display results for *Log (New Equity)* defined as the natural logarithm of one plus the dollar value of common stock issued by the firm via seasoned public offers (SPOs) during a fiscal year. Models (5) – (8) for *New Equity* scaled by lagged total assets (*TA*). Models (9) – (12) for *Log (New Debt)* defined as the natural logarithm of one plus the dollar value of total long-term debt issued during a fiscal year. Models (13) – (16) for *New Debt* scaled by lagged total assets (*TA*). The sample comprises firms that went public as an "Emerging Growth Company" (EGC) between April 6, 2012 and April 30, 2019. See Section 3.1 for a detailed description of the sample construction. *ExEGC* is a dummy equal to one for firms having a float above $700 million at the end of second fiscal quarter that are subject to mandatory disclosure under the "Large Accelerated Filer" (LAF) regulation, and zero for firms whose float is below the threshold. To minimize the effect of confounding factors, the analysis is restricted to firms whose float is within a bandwidth h = $250 million around the LAF cutoff. See Table A4 in the online appendix for additional robustness checks using larger bandwidths $h \in$ ($300 million, $350million). For the IV regressions, *ExEGC* is the predicted treatment based on the first-stage model (2.1) using the variable *PF700* as an instrument. *PF700* is equal to one if the firm's float six months prior to the second fiscal quarter exceeds $700 million, and zero otherwise. In all regressions, industry and year fixed effects are included. Standard errors are clustered by firm, and are reported in parentheses. ***, **, and * denote significance at the 1%, 5%, and 10% level, respectively. See Table A1 for a detailed description of the variables.

| | Log(New Equity) | | | | New Equity/Assets$_{t-1}$ | | | | Log(New Debt) | | | | New Debt/Assets$_{t-1}$ | | | |
| | OLS | | IV | | OLS | | IV | | OLS | | IV | | OLS | | IV | |
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)	(14)	(15)	(16)
ExEGC	1.385***	1.108***	0.634	0.402	0.269***	0.301***	-0.175	-0.140	0.621**	0.593**	1.358*	1.801**	0.169**	0.165**	0.341**	0.443**
	(0.270)	(0.293)	(0.729)	(0.761)	(0.077)	(0.070)	(0.196)	(0.190)	(0.251)	(0.269)	(0.729)	(0.745)	(0.070)	(0.076)	(0.159)	(0.189)
Log (Assets)$_{t-1}$		0.427**		0.426***		-0.256***		-0.220**		-0.121		-0.119		0.012		-0.017
		(0.176)		(0.153)		(0.096)		(0.088)		(0.269)		(0.247)		(0.076)		(0.071)
Log (Employees)$_{t-1}$		0.066		0.073*		0.007		0.012		-0.051		-0.062		-0.012		-0.016
		(0.041)		(0.037)		(0.010)		(0.010)		(0.050)		(0.049)		(0.011)		(0.011)
Debt to Assets$_{t-1}$		-1.920		-2.217**		-0.144		-0.333		-0.591		-0.082		-0.270		-0.122
		(1.174)		(1.039)		(0.291)		(0.331)		(1.399)		(1.344)		(0.435)		(0.405)
Cash to Assets$_{t-1}$		0.003		0.113		0.034		0.111		-0.931		-1.118		-0.123		-0.175
		(0.703)		(0.650)		(0.200)		(0.204)		(0.684)		(0.668)		(0.155)		(0.149)
Capex to Assets$_{t-1}$		1.306$^+$		1.451**		0.218		0.311		1.321		1.073		-0.711		-0.540
		(0.668)		(0.627)		(0.238)		(0.257)		(0.850)		(0.840)		(0.470)		(0.414)
R&D to Assets$_{t-1}$		-0.782		-1.362		-0.143		-0.460		4.070		5.063		-0.562		-0.612*
		(2.070)		(1.927)		(0.399)		(0.377)		(3.003)		(2.602)		(0.349)		(0.329)
Log (Age)$_{t-1}$		-1.192		-1.233		-0.531		-0.487*		-4.722***		-4.653***		0.002		0.019
		(1.414)		(1.279)		(0.441)		(0.412)		(1.605)		(1.473)		(0.026)		(0.026)
Tobin's Q$_{t-1}$		-0.158		-0.200**		-0.022		-0.048		-0.109		-0.038		0.036**		0.030*
		(0.106)		(0.098)		(0.028)		(0.029)		(0.128)		(0.119)		(0.018)		(0.016)
Log (Board Size)$_{t-1}$		0.113**		0.123***		0.035**		0.045***		0.191***		0.173***		-0.005		-0.044
		(0.047)		(0.045)		(0.017)		(0.016)		(0.072)		(0.065)		(0.067)		(0.064)
Board Independence$_{t-1}$		0.591*		0.682**		0.046		0.112		-0.107		-0.264		-0.040		-0.051
		(0.330)		(0.320)		(0.080)		(0.081)		(0.368)		(0.359)		(0.244)		(0.213)
Stock Market Return$_{t-1}$		-1.721*		-1.811*		-0.073		-0.068		-1.284		-1.131		1.683		1.175
		(1.005)		(0.951)		(0.299)		(0.309)		(1.113)		(1.010)		(1.585)		(1.510)
Hot SPO Market		-6.489		-5.079		0.051		0.904		10.679		8.266		0.041		0.070
		(7.691)		(6.898)		(1.328)		(1.488)		(6.787)		(6.546)		(0.071)		(0.080)
Constant	3.456***	3.082***	-0.582	-1.224	0.035	0.112***	0.066	0.036	0.802	5.199**	0.732	2.844**	0.843	0.838	-0.029	0.252

	(0.515)	(1.072)	(0.563)	(1.007)	(0.746)	(0.006)	(0.159)	(0.667)	(0.944)	(2.403)	(0.618)	(1.205)	(0.577)	(0.789)	(0.140)	(0.476)
Float Terms	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y
Year/Industry FE	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y
Observations	323	276	323	276	273	273	273	273	323	276	323	276	273	273	273	273
Adjusted R^2	0.218	0.269	0.194	0.248	0.197	0.392	0.087	0.289	0.305	0.381	0.286	0.332	0.187	0.235	0.162	0.173
Durbin			1.374	1.095			6.465	6.368			1.227	2.979			1.401	2.839
p(Durbin)			0.241	0.295			0.011	0.012			0.268	0.084			0.237	0.092
Wu			1.235	0.904			5.826	5.357			1.102	2.477			1.239	2.352
p(Wu)			0.267	0.343			0.017	0.022			0.295	0.117			0.267	0.127
First-stage R^2			0.175	0.202			0.202	0.218			0.175	0.202			0.192	0.204
First Stage F-stat			35.663	27.101			36.978	25.309			35.663	27.101			36.774	23.724

Table 3. EGC Fundraising by Listing Age

Table presents OLS regression estimates based on equation (1) where the dependent variables are various measures of issuance. *New Equity (D)* is a dummy equal to one if the firm issued new equity via seasoned public offers (SPOs) during a fiscal year. *New Debt (D)* is a dummy equal to one if the firm issued log-term debt during a fiscal year. The sample comprises firms that went public as an "Emerging Growth Company" (EGC) between April 6, 2012 and April 30, 2019. See Section 3.1 for a detailed description of the sample construction. To avoid the impact of confounding factors, the analysis is restricted to a bandwidth of h = \$350 million around the LAF cutoff (i.e., firms with float between \$350 and \$1,050 million in any given year). *ExEGC* is a dummy equal to one for firms having a float above \$700 million at the end of second fiscal quarter that are subject to mandatory disclosure under the "Large Accelerated Filer" (LAF) regulation, and zero for firms whose float is below the threshold. *IPO Year* denotes the year in which the firm became a publicly traded company. In all regressions, industry-year fixed effects are included. Standard errors are clustered by firm and reported in parentheses. ***, **, and * denote significance at the 1%, 5%, and 10% level, respectively. See Table A1 for a detailed description of the variables.

	New Equity (D)			New Debt (D)		
	(1)	(2)	(3)	(4)	(5)	(6)
t = IPO year + 1	0.012	0.035	0.035	0.077	0.028	0.027
	(0.105)	(0.096)	(0.096)	(0.079)	(0.083)	(0.083)
t = IPO year + 2	-0.167	-0.119	-0.122	0.022	-0.043	-0.040
	(0.110)	(0.107)	(0.107)	(0.081)	(0.093)	(0.093)
t = IPO year + 3	-0.334***	-0.331***	-0.337***	0.047	-0.004	-0.003
	(0.103)	(0.097)	(0.098)	(0.113)	(0.115)	(0.115)
t = IPO year + 4	-0.022	-0.034	-0.034	0.043	0.013	0.018
	(0.126)	(0.116)	(0.115)	(0.105)	(0.101)	(0.102)
t = IPO year + 5	-0.002	0.026	0.072	-0.119	-0.090	-0.197**
	(0.200)	(0.156)	(0.159)	(0.193)	(0.172)	(0.097)
t = IPO year + 6	0.315***	0.305**	0.306**	-0.145*	-0.371***	-0.366***
	(0.109)	(0.118)	(0.118)	(0.085)	(0.108)	(0.108)
ExEGC	0.113	0.025	0.025	-0.002	-0.021	-0.011
	(0.157)	(0.136)	(0.136)	(0.097)	(0.113)	(0.113)
t = IPO year + 1 × ExEGC	0.013	0.022	0.022	0.040	0.053	0.050
	(0.186)	(0.157)	(0.156)	(0.104)	(0.121)	(0.121)
t = IPO year + 2 × ExEGC	0.039	0.031	0.035	0.020	0.026	0.010
	(0.198)	(0.169)	(0.170)	(0.134)	(0.144)	(0.144)
t = IPO year + 3 × ExEGC	0.195	0.310**	0.315**	-0.010	-0.021	-0.022
	(0.173)	(0.150)	(0.150)	(0.145)	(0.148)	(0.147)
t = IPO year + 4 × ExEGC	-0.079	-0.005	-0.004	0.085	0.018	0.009
	(0.172)	(0.145)	(0.145)	(0.161)	(0.133)	(0.132)
t = IPO year + 5 × ExEGC	0.025	0.065	0.020	0.246	0.140	0.240
	(0.210)	(0.158)	(0.160)	(0.249)	(0.210)	(0.152)
t = IPO year + 6 × ExEGC	-0.513***	-0.424**	-0.480***	0.373	0.701	1.048***
	(0.163)	(0.173)	(0.152)	(0.470)	(0.446)	(0.183)
Constant	0.426***	0.388***	-0.242	-0.000	0.023	0.484
	(0.128)	(0.140)	(0.252)	(0.000)	(0.222)	(0.437)
Firm Controls	N	Y	Y	N	Y	Y
Macro Controls	N	N	Y	N	N	Y
Industry/Year FE	Y	Y	Y	Y	Y	Y
Observations	819	819	807	819	819	807
Adjusted R^2	0.390	0.468	0.464	0.408	0.501	0.504

Table 4. Impact of EGC Status Loss on Internal Investments

Table presents regression discontinuity (RD) estimates where the dependent variables are various measures of internal investments. The OLS estimates are based on equation (1); the IV estimates are based on equations (2.1) and (2.2). Panel (a) considers four measures of internal investments: capital expenditure (*Capex*), investments in property, plant, and equipment (*PPE*), R&D expenditure (*R&D*), and number of employees (*Employees*); each standardized by lagged sales. Panel (b) considers the year-on-year change in these investment measures relative to total sales. *New Equity* is the dollar value of common stock issued by the firm via seasoned public offers (SPOs) during a fiscal year. *New Debt* is the dollar value of total long-term debt issued during a fiscal year. The sample comprises firms that went public as an "Emerging Growth Company" (EGC) between April 6, 2012 and April 30, 2019. See Section 3.1 for a detailed description of the sample construction. *ExEGC* is a dummy equal to one for firms having a float above \$700 million at the end of second fiscal quarter that are subject to mandatory disclosure under the "Large Accelerated Filer" (LAF) regulation, and zero for firms whose float is below the threshold. To minimize the effect of confounding factors, the analysis is restricted to firms whose float is within a bandwidth $h = \$250$ million around the LAF cutoff. For the IV regressions, *ExEGC* is the predicted treatment based on the first-stage model (2.1) using the variable *PF700* as an instrument. *PF700* is equal to one if the firm's float six months prior to the second fiscal quarter exceeds \$700 million, and zero otherwise. In all regressions, industry and year fixed effects are included. Standard errors are clustered by firm, and are reported in parentheses. ***, **, and * denote significance at the 1%, 5%, and 10% level, respectively. See Table A1 for a detailed description of the variables.

a) Investments by EGC status

	Capex/Sales		PPE/Sales		R&D/Sales		Employees/Sales	
	OLS	IV	OLS	IV	OLS	IV	OLS	IV
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
ExEGC	-0.026	-0.186***	-0.136	-0.638***	0.008	-0.137**	-0.000	-0.005**
	(0.021)	(0.060)	(0.084)	(0.236)	(0.024)	(0.062)	(0.001)	(0.002)
Controls	Y	Y	Y	Y	Y	Y	Y	Y
Industry/Year FE	Y	Y	Y	Y	Y	Y	Y	Y
Observations	276	276	276	276	276	276	276	276
Adjusted R^2	0.247	0.092	0.449	0.364	0.200	0.073	0.287	0.185
First-Stage R^2		0.185		0.185		0.185		0.185
First Stage F-stat		29.823		29.823		29.823		29.823

b) Investment growth by EGC status and fundraising

	Δ_{1y}Capex/Sales		Δ_{1y}PPE/Sales		Δ_{1y}R&D/Sales		Δ_{1y}Employee/Sales	
	OLS	IV	OLS	IV	OLS	IV	OLS	IV
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
ExEGC	0.009	-0.068	-0.032	-0.278***	0.100	-0.004	-0.462	-0.740
	(0.021)	(0.043)	(0.063)	(0.100)	(0.095)	(0.044)	(0.735)	(1.458)
Log (New Equity)$_{t-1}$	-0.013	-0.018***	-0.025	-0.041**	-0.020***	-0.027***	-0.580**	-0.598***
	(0.007)	(0.007)	(0.027)	(0.020)	(0.003)	(0.006)	(0.204)	(0.190)
Log (New Debt)$_{t-1}$	0.016*	0.012*	0.012	0.001	0.021	0.016	-0.039	-0.051
	(0.008)	(0.007)	(0.022)	(0.018)	(0.016)	(0.011)	(0.249)	(0.216)
ExEGC × Log (New Equity)$_{t-1}$	0.011*	0.022***	0.040	0.076***	0.035***	0.051***	0.537**	0.579**
	(0.005)	(0.007)	(0.031)	(0.024)	(0.003)	(0.012)	(0.213)	(0.281)
ExEGC × Log (New Debt)$_{t-1}$	-0.015	-0.006	-0.003	0.023**	-0.024	-0.013	-0.039	-0.010
	(0.009)	(0.009)	(0.013)	(0.010)	(0.017)	(0.011)	(0.155)	(0.212)
Controls	Y	Y	Y	Y	Y	Y	Y	Y
Industry/Year FE	Y	Y	Y	Y	Y	Y	Y	Y
Observations	276	276	276	276	276	276	276	276
Adjusted R^2	0.049	0.013	0.159	0.108	0.046	0.037	0.013	0.012
First-stage R^2		0.504		0.504		0.504		0.504
First Stage F-stat		4.763		4.763		4.763		4.763

Table 5. Impact of EGC Status Loss on External Investments

Table presents regression discontinuity (RD) estimates where the dependent variables are various measures of external investments. The OLS estimates are based on equation (1); the IV estimates are based on equations (2.1) and (2.2). We considers three measures of external investments: a dummy indicating if the firm made at least one acquisition (*Acquisition*), the log dollar value of acquisitions (*Acquisition Value*), and a dummy equal to one if all acquisitions are paid for entirely in cash (*All Cash Acquisitions*). *New Equity* is the dollar value of common stock issued by the firm via seasoned public offers (SPOs) during a fiscal year. *New Debt* is the dollar value of total long-term debt issued during a fiscal year. The sample comprises firms that went public as an "Emerging Growth Company" (EGC) between April 6, 2012 and April 30, 2019. See Section 3.1 for a detailed description of the sample construction. *ExEGC* is a dummy equal to one for firms having a float above $700 million at the end of second fiscal quarter that are subject to mandatory disclosure under the "Large Accelerated Filer" (LAF) regulation, and zero for firms whose float is below the threshold. To minimize the effect of confounding factors, the analysis is restricted to firms whose float is within a bandwidth h = $250 million around the LAF cutoff. For the IV regressions, *ExEGC* is the predicted treatment based on the first-stage model (2.1) using the variable *PF700* as an instrument. *PF700* is equal to one if the firm's float six months prior to the second fiscal quarter exceeds $700 million, and zero otherwise. In all regressions, industry and year fixed effects are included. Standard errors are clustered by firm, and reported in parentheses. ***, **, and * denote significance at the 1%, 5%, and 10% level, respectively. See Table A1 for a description of the variables.

a) Acquisitions by EGC status

	Acquisition (D)		Log (Acquisition Value)		All Cash Acquisitions (D)	
	OLS	IV	OLS	IV	OLS	IV
	(1)	(2)	(3)	(4)	(5)	(6)
ExEGC	-0.072**	-0.183***	-0.258**	-1.022***	-0.050*	-0.151***
	(0.026)	(0.068)	(0.119)	(0.269)	(0.025)	(0.036)
Controls	Y	Y	Y	Y	Y	Y
Industry/Year FE	Y	Y	Y	Y	Y	Y
Observations	276	276	276	276	276	276
Adjusted R^2	0.131	0.086	0.111	0.012	0.209	0.163
First-Stage R^2		0.172		0.172		0.172
First Stage F-stat		7.269		7.269		7.269

b) Acquisitions by EGC status and fundraising

	Acquisition (D)		Log (Acquisition Value)		All Cash Acquisitions (D)	
	OLS	IV	OLS	IV	OLS	IV
	(1)	(2)	(3)	(4)	(5)	(6)
ExEGC	-0.055	-0.167**	-0.244	-0.998***	-0.039	-0.130***
	(0.034)	(0.073)	(0.190)	(0.239)	(0.028)	(0.049)
Log (New Equity)$_{t-1}$	0.006	-0.004	0.004	-0.063	-0.003	-0.011
	(0.015)	(0.008)	(0.085)	(0.054)	(0.010)	(0.007)
Log (New Debt)$_{t-1}$	0.005	0.001	0.029	0.003	0.005	0.002
	(0.020)	(0.020)	(0.084)	(0.081)	(0.019)	(0.018)
ExEGC × Log (New Equity)$_{t-1}$	0.002	0.018***	0.044	0.156***	0.007	0.021***
	(0.015)	(0.006)	(0.088)	(0.050)	(0.011)	(0.006)
ExEGC × Log (New Debt)$_{t-1}$	-0.007	0.004	-0.047	0.032	-0.011	-0.001
	(0.014)	(0.018)	(0.072)	(0.074)	(0.014)	(0.016)
Controls	Y	Y	Y	Y	Y	Y
Industry/Year FE	Y	Y	Y	Y	Y	Y
Observations	276	276	276	276	276	276
Adjusted R^2	0.048	0.024	0.051	0.071	0.062	0.042
First-stage R^2		0.566		0.566		0.566
First Stage F-stat		17.342		17.342		17.342

Table 6. EGC Status Loss and Growth Opportunities

Table presents regression discontinuity (RD) estimates where the dependent variables are various measures of growth opportunities. The OLS/Probit estimates are based on equation (1); the IV estimates are based on equations (2.1) and (2.2). The dependent variable in Models (1) – (2) is the firm's Tobin's q in a given year. The dependent variable in Models (3) – (4) is a dummy equal to one if the firm's Tobin's q exceeds q_0 (Tobin's q in the IPO year). *Listing Age* denotes the number of years the firm has been a public company. The sample comprises firms that went public as an "Emerging Growth Company" (EGC) between April 6, 2012 and April 30, 2019. See Section 3.1 for a detailed description of the sample construction. *ExEGC* is a dummy equal to one for firms having a float above \$700 million at the end of second fiscal quarter that are subject to mandatory disclosure under the "Large Accelerated Filer" (LAF) regulation, and zero for firms whose float is below the threshold. To minimize the effect of confounding factors, the analysis is restricted to firms whose float is within a bandwidth h = \$250 million around the LAF cutoff. For the IV regressions, *ExEGC* is the predicted treatment based on the first-stage model (2.1) using the variable *PF700* as an instrument. *PF700* is equal to one if the firm's float six months prior to the second fiscal quarter exceeds \$700 million, and zero otherwise. In all regressions, industry–year fixed effects are included. Standard errors are clustered by firm, and reported in parentheses. ***, **, and * denote significance at the 1%, 5%, and 10% level, respectively. See Table A1 for a description of the variables.

	Panel A: Tobin's q		Panel B: Tobin's $q > q_0$	
	OLS	IV	Probit	IV
	(1)	(2)	(3)	(4)
ExEGC	2.920***	3.674**	2.047***	1.298***
	(0.731)	(1.794)	(0.579)	(0.459)
Log (Listing Age)	0.088	0.418	-0.074	0.238
	(0.398)	(0.582)	(0.444)	(0.167)
ExEGC × Log (Listing Age)	-1.631***	-2.389**	-1.054**	-0.892***
	(0.571)	(1.176)	(0.481)	(0.313)
Controls	Y	Y	Y	Y
Industry-Year FE	Y	Y	Y	Y
Observations	276	276	276	276
Adjusted/Pseudo R²	0.331	0.327	0.234	0.124
First-Stage R²		0.176		0.176
First Stage F-stat		15.729		15.729

Table 7. Which Factors Affect Growth Opportunities?

Table presents regression discontinuity (RD) estimates where the dependent variable measures growth opportunities. The OLS estimates are based on equation (1); the IV estimates are based on equations (2.1) and (2.2). The dependent variable is the firm's Tobin's q in a given year. In panel (a), we investigate whether firms time the raising of their funds to sponsor future growth. *New Equity* is the dollar value of common stock issued by the firm via seasoned public offers (SPOs) during a fiscal year. *New Debt* is the dollar value of total long-term debt issued during a fiscal year. In panel (b), we explore which investment policies (internal and external) affect future growth opportunities. Panel (b) shows IV estimates only. See Table A6 in the online appendix for the corresponding OLS results. The sample comprises firms that went public as an "Emerging Growth Company" (EGC) between April 6, 2012 and April 30, 2019. See Section 3.1 for a detailed description of the sample construction. *ExEGC* is a dummy equal to one for firms having a float above \$700 million at the end of second fiscal quarter that are subject to mandatory disclosure under the "Large Accelerated Filer" (LAF) regulation, and zero for firms whose float is below the threshold. To minimize the effect of confounding factors, the analysis is restricted to firms whose float is within a bandwidth h = \$250 million around the LAF cutoff. For the IV regressions, *ExEGC* is the predicted treatment based on the first-stage model (2.1) using the variable *PF700* as an instrument. *PF700* is equal to one if the firm's float six months prior to the second fiscal quarter exceeds \$700 million, and zero otherwise. In all regressions, industry–year fixed effects are included. Standard errors are clustered by firm, and reported in parentheses. ***, **, and * denote significance at the 1%, 5%, and 10% level, respectively. See Table A1 for a description of the variables.

a) Fundraising timing

	Dependent Variable: Tobin's q			
	OLS		IV	
	(1)	(2)	(3)	(4)
ExEGC	1.066***	0.331**	0.758	0.303
	(0.237)	(0.117)	(0.522)	(0.770)
Log (New Equity)$_{t-1}$	0.081	-0.094**	0.079*	-0.096
	(0.042)	(0.029)	(0.035)	(0.069)
Log (New Debt)$_{t-1}$	-0.105	-0.127*	-0.100	-0.128*
	(0.082)	(0.052)	(0.067)	(0.051)
ExEGC × Log (New Equity)$_{t-1}$		0.330***		0.335**
		(0.073)		(0.120)
ExEGC × Log (New Debt)$_{t-1}$		0.053		0.056
		(0.076)		(0.110)
Controls	Y	Y	Y	Y
Industry FE	Y	Y	Y	Y
Year FE	Y	Y	Y	Y
Observations	276	276	276	276
Adjusted R^2	0.604	0.631	0.600	0.631
First-Stage R^2			0.164	0.545
First-stage F-stat			7.91	5.596

b) Investment channels

	Tobin's q					
	(1)	(2)	(3)	(4)	(5)	(6)
ExEGC	-0.082	-0.216	0.107	0.520	0.540	0.372
	(1.092)	(0.982)	(0.863)	(0.832)	(0.800)	(0.863)
Internal Investments						
Capex/Sales	-1.294					
	(2.453)					
ExEGC × Capex/Sales	2.394					
	(4.079)					
PPE/Sales		-0.306				
		(0.367)				
ExEGC × PPE/Sales		1.035				
		(1.166)				
R&D/Sales			-0.025			
			(0.014)			
ExEGC × R&D/Sales			-0.009			
			(0.057)			
External Investments						
Acquisition (D)				1.767***		
				(0.413)		
ExEGC × Acquisition (D)				-2.041		
				(1.066)		
Log (Acquisition Value)					0.425***	
					(0.072)	
ExEGC × Log (Acquisition Value)					-0.601**	
					(0.209)	
All Cash Acquisition (D)						2.449***
						(0.400)
ExEGC × All Cash Acquisition (D)						-3.654***
						(0.919)
Constant	2.213	1.273	1.214	1.448	2.022	1.435
	(2.415)	(2.526)	(2.735)	(2.707)	(2.607)	(3.073)
Controls	Y	Y	Y	Y	Y	Y
Industry FE	Y	Y	Y	Y	Y	Y
Year FE	Y	Y	Y	Y	Y	Y
Observations	197	197	197	197	197	197
Adjusted R^2	0.518	0.495	0.531	0.538	0.534	0.521
First-Stage R^2	0.234	0.232	0.233	0.245	0.245	0.241
First Stage F-stat	24.980	5.191	31.409	12.746	21.894	9.390

Table 8. Impact of EGC Status Loss on Operating Efficiency

Table presents regression discontinuity (RD) estimates where the dependent variables are various proxies denoting operational efficiency. The OLS estimates are based on equation (1); the IV estimates are based on equations (2.1) and (2.2). The dependent variable in Models (1) – (2) is the firm's total sales scaled by total assets (*Sales/Assets*). The dependent variable in Models (3) – (4) is return on assets (*ROA*). The dependent variable in Models (5) – (6) is a dummy indicating if the firm had a net income below zero in a given year. The dependent variable in Models (7) – (8) is a measure of the firm's financial constraints (*KZ-Index*), based on Kaplan and Zingales (1997). We follow Lamont, Polk and Saaá-Requejo (2001) and compute this index as – $1.0001909 \times [(IB+DP)/PPENTT – 1] + 0.2826389 \times [(SIZE)/AT] + 3.139193 \times [(DLTT+DLC)/(DLTT+DLC+SEQ)] – 39.3678 \times [(DVC+DVP)/PPENTT – 1] – 1.314759 \times [CHE/ATT – 1]$. *SIZE* is logarithm of the market value of assets at beginning of the year, and is $AT – CEQ + (CSHO \times PRCCF) – TXTB$. Data for the variables used in estimating the KZ-Index are obtained from Compustat. The sample comprises firms that went public as an "Emerging Growth Company" (EGC) between April 6, 2012 and April 30, 2019. See Section 3.1 for a detailed description of the sample construction. *ExEGC* is a dummy equal to one for firms having a float above $700 million at the end of second fiscal quarter that are subject to mandatory disclosure under the "Large Accelerated Filer" (LAF) regulation, and zero for firms whose float is below the threshold. To minimize the effect of confounding factors, the analysis is restricted to firms whose float is within a bandwidth h = $250 million around the LAF cutoff. For the IV regressions, *ExEGC* is the predicted treatment based on the first-stage model (2.1) using the variable *PF700* as an instrument. *PF700* is equal to one if the firm's float six months prior to the second fiscal quarter exceeds $700 million, and zero otherwise. In all regressions, industry and year fixed effects are included. Standard errors are clustered by firm, and reported in parentheses. ***, **, and * denote significance at the 1%, 5%, and 10% level, respectively. See Table A1 for a description of the variables.

	Sales/Assets		ROA		Negative NI		KZ-Index	
	OLS	IV	OLS	IV	OLS	IV	OLS	IV
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
ExEGC	0.191***	0.310**	0.076**	0.290***	-0.162***	-0.431***	-0.303*	-0.737**
	(0.058)	(0.157)	(0.038)	(0.106)	(0.056)	(0.164)	(0.156)	(0.333)
Controls	Y	Y	Y	Y	Y	Y	Y	Y
Industry FE	Y	Y	Y	Y	Y	Y	Y	Y
Year FE	Y	Y	Y	Y	Y	Y	Y	Y
Observations	272	272	273	273	276	276	270	270
Adjusted R^2	0.702	0.696	0.480	0.392	0.419	0.350	0.164	0.119
First-Stage R^2		0.197		0.188		0.184		0.201
First Stage F-stat		28.002		26.79		29.486		27.606

ONLINE APPENDIX

Disclosure, Firm Growth, and the JOBS Act

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A. Supplementary Tables and Figures

Figure A1. Do EGCs manipulate float well in advance of the LAF deadline?

Figure illustrates a test of density discontinuity in the float of EGCs around the vertical cutoff (float = $700 million). The running variable *float* is the market value of common equity held by public investors on the last day six months prior to the second fiscal quarter. The sample comprises firms that went public as EGCs between April 6, 2012 and April 30, 2019. The manipulation test statistic at the top right corner of the plot is based on local polynomial density estimation from Cattaneo *et al.* (2019). The *p*-value of the test statistic is in the parantheses. A statistically significant discontinuity indicates possible manipulation of the float near the cutoff.

Manipulation test statistic: -0.6369 (0.5242)
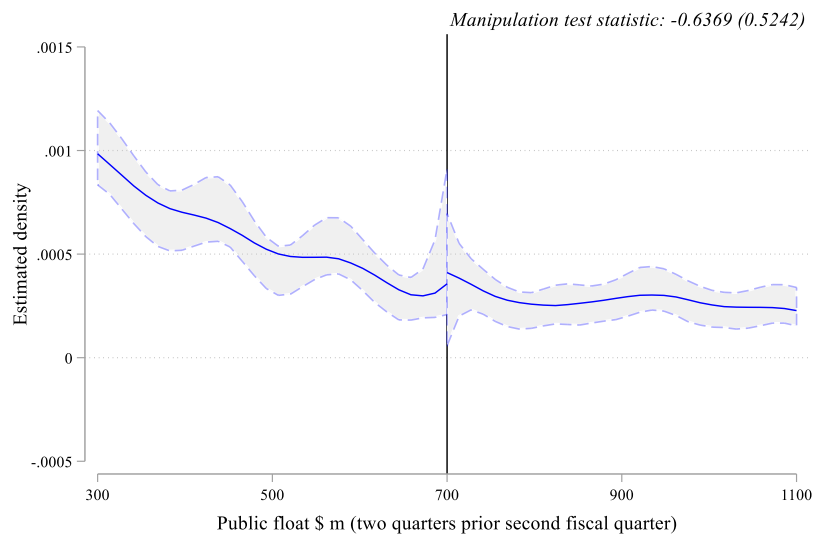
Figure A2. Correlation between float at the end of second fiscal quarter and six months prior among EGC firms

Figure shows a scatter plot and linear prediction line between the float of an EGC at the end of a second fiscal quarter (y-axis) and its float six months prior (x-axis). *Float* of a firm is the market value of common equity held by public investors. The adjusted R^2 of the linear regression is shown at the top right corner.

Adjusted R^2: 0.74

1
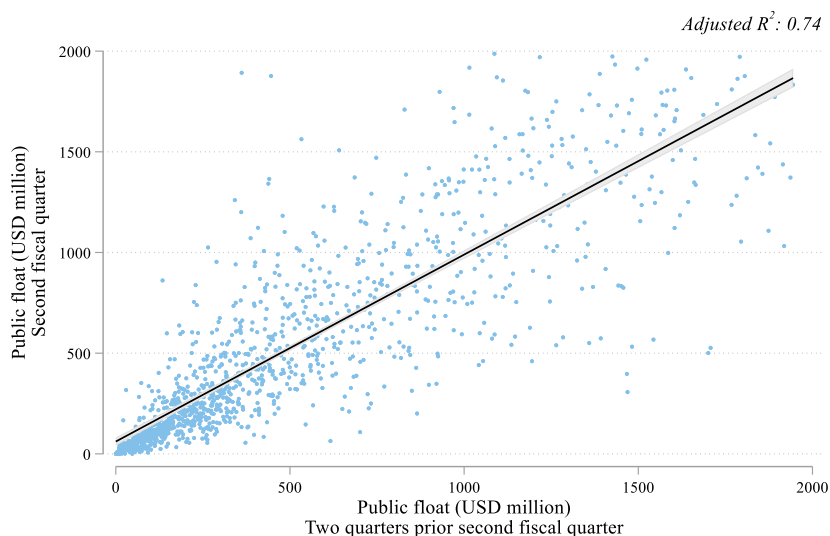
Figure A3. Observable EGC characteristics

Figure shows evidence of smoothness of observable firm characteristics around the LAF treatment threshold (float = $700 million) among EGC firms. The observable characteristics considered are listed on top of each plot. The running variable *float* is the market value of common equity of the sample firm held by public investors and measured on the last day of the second fiscal quarter each year after the IPO. Blue lines represent the fitted prediction line from a local polynomial estimator. Discontinuities in the fitted prediction at the LAF threshold imply that concerned firm characteristic is imbalanced at the cutoff.
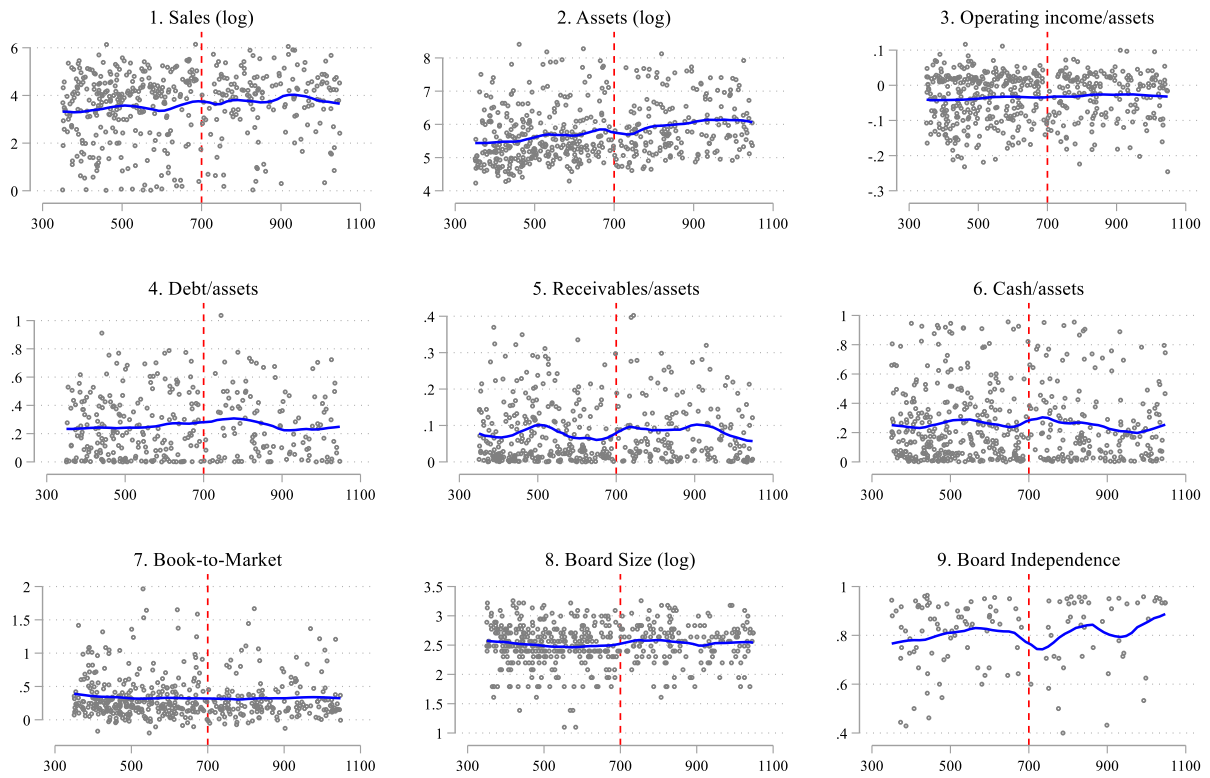
Figure A4. IPO activity around the JOBS Act

Panel (a) shows the number of IPOs filed per quarter between January 1, 2000 and December 31, 2017. The data are obtained from S-1 filings available with the SEC. See Section 2.1 for a description of the sample. *EGC* refers to emerging growth companies that went public after the passage of Title I of the JOBS Act on April 5, 2012 and chose to avail exemptions from mandatory disclosure under the Act's provisions at the time of filing. See Section 3.1 for a detailed description of the sample construction. Panel (b) presents bar charts of the number of IPOs filed by EGC firms (left plot) and NonEGC firms (right plot). Firms in each chart are split according to their perceived growth opportunities at the time of their IPO into high-growth (Tobin's $q > 1$) and low-growth (Tobin's $q \leq 1$) categories. *NonEGC* refers to firms that went public before the JOBS Act (January 1, 2000−April 4, 2012) and thus do not quality for EGC treatment during their IPO.

a) IPOs filed per quarter
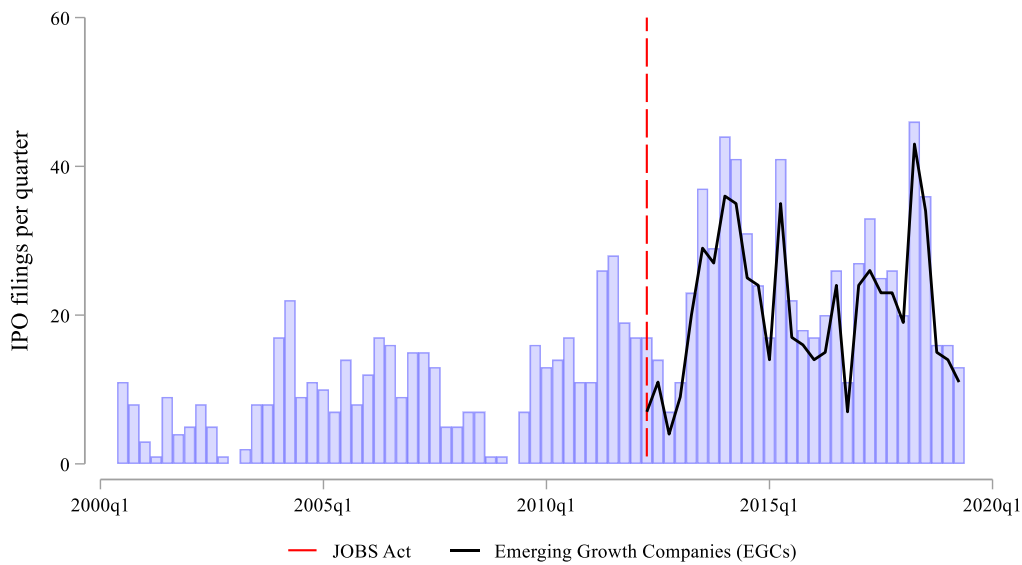
b) IPOs by firm growth opportunities (Tobin's Q)

3
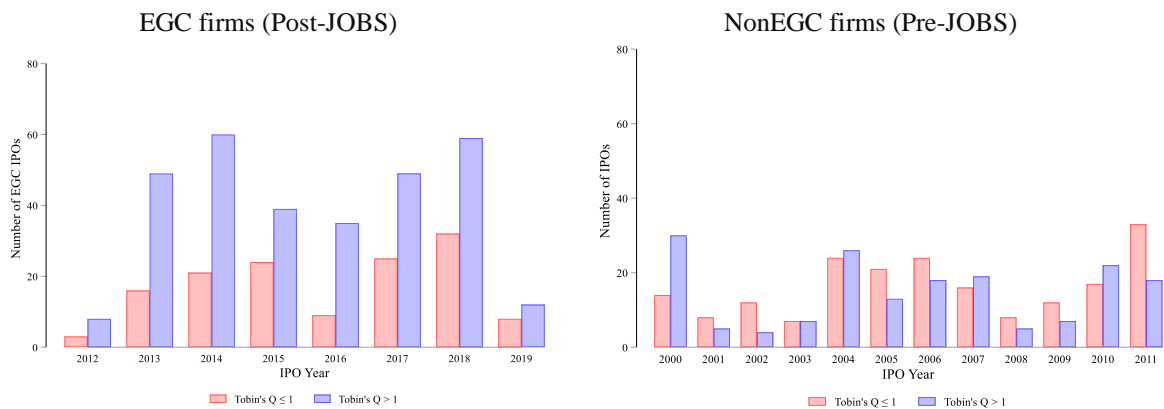
Figure A5. NonEGC Fundraising by Listing Age

The sample for the below plots comprises NonEGC firms that went public before the JOBS Act (January 1, 2000−April 4, 2012) and thus do not quality for EGC treatment during their IPO. The Panel (a) presents the fraction of NonEGC firms raising equity during the first ten years after their IPO. The left-hand plot covers all firms in the sample while the right-hand plot splits the firms according to their perceived growth opportunities each year into high-growth (Tobin's $q > 1$) and low-growth (Tobin's $q \leq 1$) categories. See Section 3.1 for a description of the sample construction. Panel (b) presents the fraction of NonEGC firms raising debt during the first ten years after their IPO.

a) Fraction of NonEGC firms raising equity
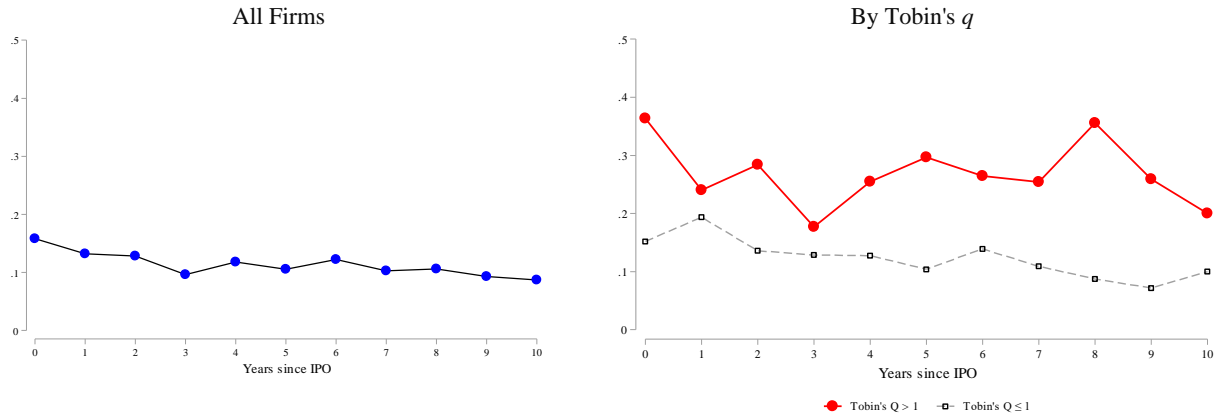
b) Fraction of NonEGC firms raising debt

4
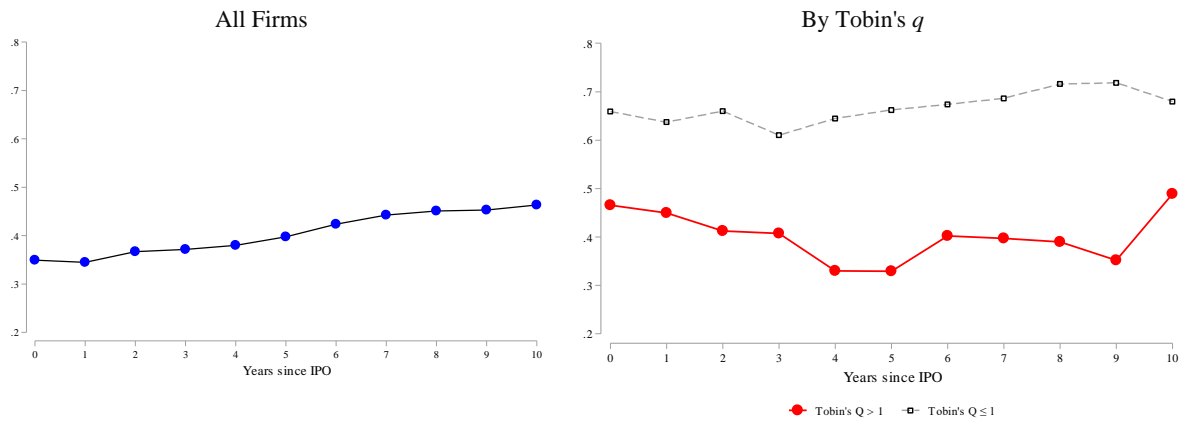
Appendix: Variable definitions

The primary data sources for computing the variables are Capital IQ, Compustat, and BoardEx. Italicized names in brackets refer to Compustat data items.

Variable	Unit	Description
JOBS Act		
Post JOBS	0/1	Dummy variable equal to one for equity offers in the period following Title I of the JOBS Act (between April 6, 2012 and April 30, 2019), and zero for equity offers in the period before Title I (between January 1, 2000 and April 4, 2012).
Fundraising		
New Equity	$ mil.	Dollar value of common stock issued by the firm via seasoned public offers (SPOs) during a fiscal year. Data is from Capital IQ.
Purchased Equity	$ mil.	Funds used to repurchase common stock (*PRSTKCC*).
Net Equity Issuance	$ mil.	Difference between *New Equity* and *Purchased Equity*.
Direct Equity Costs	Ratio	Underwriting fees charged for an SPO scaled by offer proceeds. Data from Capital IQ.
Indirect Equity Costs	Ratio	Minus one times the difference between previous day's closing price and the SPO offer price, scaled by the previous day's closing price. Data from Capital IQ. This variable is equivalent to the "underpricing" measure used in extant literature.
New Debt	$ mil.	Total annual long-term debt issued (*DLTIS*), and covers bonds, notes, lease obligations, debt reclassifications, and acquisition loans.
Debt Costs	Ratio	Annual interest expense (*XINT*) divided by long-term debt (*DLTT*) plus debt in current liabilities (*DLC*).
Internal Investments		
Firm characteristics		
EGC	0/1	Dummy equal to one if the firm went public as an "Emerging Growth Company" (EGC) under provisions of Title I of the JOBS Act, and zero otherwise. Firms can qualify for EGC treatment if their annual gross revenue is below $1 billion in the most recent fiscal year and if they are going public for the first time after December 9, 2011. These firms can remain qualified for EGC treatment when conducting secondary public equity offers (SPOs) for up to five years after the IPO if their annual gross revenue is below $1 billion ($1.07 billion since April 1, 2017), no more than $1 billion was issued in non-convertible debt in the previous three years, and the float is below $700 million in the most recent second fiscal quarter.
ExEGC	0/1	Dummy equal to one if the float of an EGC exceeds $700 million on the last day of the most recent second fiscal quarter, and zero otherwise. An EGC whose float exceeds the $700 million limit will become a "large accelerated filer" (LAF) and will be subject to mandatory disclosure requirements. An EGC that ceases to remain exempt due to the LAF rule cannot be reclassified back.
NonEGC	0/1	Dummy equal to one if the firm went public before the JOBS Act went into effect (i.e., between April 6, 2012 and April 30, 2019), and thus would not have qualified for disclosure exemptions under the Act.
Float	$ mil.	Market value of the portion of common equity held by public investors.
Total Assets	$ mil.	Total assets (*AT*) reported in the most recent fiscal year.
Total Sales	$ mil.	Total revenue (*SALE*) reported in the most recent fiscal year.
Net Income (NI)	$ mil.	Sales minus operating expenses and losses (*NI*).
Change in Net Income	Ratio	Difference in net income (NI) between current and previous fiscal year.
Negative NI	0/1	Dummy equal to one if the net income is below zero.
Cash flow from Operations	$ mil.	Operating cash flow (OANCF) minus extraordinary items (*XIDOC*).
Employees	Integer	Total number of employees in the most recent fiscal year (*EMP*).
Age	Integer	Age of the firm (in years) since the data of incorporation.
Listing Age	Integer	Number of years since the firm went public through an IPO.

Debt to Total Assets	Ratio	Ratio of long-term debt (*DLTT*) to total assets (*AT*).
Cash to Total Assets	Ratio	Ratio of cash and cash equivalents (*CHE*) to total assets (*AT*).
Return on Assets (ROA)	Ratio	Operating income before depreciation (*OIBDP*) scaled by lagged total assets (*AT*).
Capex	$ mil.	Capital expenses (*CAPX*) net of depreciation and amortization charges (*DP*).
PPE	$ mil.	Property, plan, and equipment less depreciation used in production (*PPENT*).
R&D	$ mil.	Research and development costs (*XRD*).
Tobin's *q*	Ratio	Ratio of the market value of assets divided by book value of assets. We follow Kaplan and Zingales (1997) and estimate this ratio firm *i* in year *t*,

$$Tobin's\ Q_{i,t} = \frac{Total\ Assets_{i,t} + Market\ Equity_{i,t} - Book\ Equity_{i,t}}{Total\ Assets_{i,t}}$$

		where total assets is as reported (AT), market equity is year-end closing price (*PRCCC*) times common shares outstanding (*CSHO*), book equity is measured as stockholders' equity (*SEQ*) plus deferred taxes (*TXDB*) plus investment tax credits (*ITCB*) minus preferred stock (*PSTKRV or PSTKL or PSTK*).
Book to Market	Ratio	Total common equity (*CEQ*) plus deferred tax and investment tax credits (*TXDITC*) minus preferred stock (*PSTKRV or PSTKL or PSTK*) divided by market value of equity (*PRCCC × CSHO*) at the end of fiscal year.
KZ-Index		Measure of the firm's financial constraints based on Kaplan and Zingales (1997). We follow Lamont, Polk and Saaá-Requejo (2001) and compute this index as −1.0001909 × [(*IB+DP*)/*PPENTT* − 1] + 0.2826389 × [(*SIZE*)/*AT*] + 3.139193 × [(*DLTT+DLC*)/(*DLTT+DLC+SEQ*)] − 39.3678 × [(*DVC+DVP*)/*PPENTT* − 1] − 1.314759 × [*CHE*/*ATT* − 1]. *SIZE* is logarithm of the market value of assets at beginning of the year and is *AT* − *CEQ* + (*CSHO × PRCCF*) − *TXTB*.
Board size	Integer	Number of members on the company's board. Data from BoardEx.
Board independence	Ratio	Percentage of independent members on the board. Data from BoardEx.
Acquisition	0/1	Dummy equal to one if the firm made at least one acquisition in a given year.
Value of Acquisitions	$ mil.	Dollar value of acquisitions made by firm in a given year.
All Cash Acquisitions	0/1	Dummy equal to one if all acquisitions made by firm in a given year are paid for entirely in cash.
Audit fees	$ mil.	Total audit and audit-related fees paid per year. Data from Audit Analytics.
Accruals	Ratio	Non-cash portion of earnings, measured as income before extraordinary items (*IBC*) minus cash flow from operations (*OANCF*) plus extraordinary items (*XIDOC*), scaled by lagged assets (*AT*). Following Iliev (2010), values exceeding ±100% are censored.
Big4 Auditor	0/1	Dummy equal to one if the firm used one of the top four auditing firms in the world (PricewaterhouseCoopers, Deloitte and Touche, Ernst and Young, KPMG).
Dual CEO	0/1	Dummy equal to one if the CEO is also chairman of the board.

Public market/macroeconomic characteristics

Stock Market Return	Ratio	Monthly compounded stock market return in the most recent twelve months.
Hot SPO Market		Dummy equal to one if the number of SPOs in a given year is in the top quartile of the distribution of SPO activity per annum.
		the highest (lowest) quartile in the number of IPOs per Month.
GDP growth	Ratio	The year-on-year growth rate in the gross domestic product of a given country.

Table A1. Summary Statistics: EGC (at IPO) versus NonEGC firms

The sample comprises US firms that went public between January 1, 2000 and April 30, 2019. See Section 3.1 for a description of the sample construction. Panel A reports summary statistics on firms that went public as an "Emerging Growth Company" (EGC) under the provisions of Title I of the JOBS Act. Panel B comprises NonEGC firms that went public before the JOBS Act (January 1, 2000−April 4, 2012) and thus do not quality for EGC treatment during their IPO. Wherever applicable, total assets (TA) in the denominator are lagged by one year with respect to the numerator. See Table A1 for a description of the variables listed below. ***, **, and * denote significance at the 1%, 5%, and 10% level, respectively.

	Panel A: EGC firms (at IPO)			Panel B: NonEGC firms			Difference in means
	Mean	SD	Median	Mean	SD	Median	
Market Capitalization (second fiscal quarter)	1086.04	2162.07	450.30	1285.13	4198.82	420.60	199.09***
Age (years)	13.10	14.98	9.00	22.20	20.07	17.00	9.10***
Total Assets ($m)	573.85	1128.03	206.91	723.24	1284.35	285.36	149.39***
Total Debt/TA	0.41	0.41	0.34	0.41	0.43	0.33	0.00
LT Debt/TA	0.20	0.32	0.18	0.24	0.37	0.21	0.04**
ST Debt/TA	0.03	0.09	0.01	0.04	0.44	0.01	0.01
Tobin's Q	1.56	1.01	1.30	1.25	0.87	0.96	-0.31***
Capex/TA	0.05	0.07	0.02	0.05	0.07	0.02	0.00
R&D/TA	0.07	0.06	0.06	0.05	0.07	0.03	-0.02***
Cash/TA	0.30	0.29	0.21	0.20	0.21	0.13	-0.10***
Board Size	13.23	4.86	13.00	13.63	6.05	13.00	0.39***
Board Independence	0.95	0.12	1.00	0.96	0.10	1.00	0.01**
Number of SPOs during fiscal year	0.43	0.69	0.00	0.14	0.40	0.00	-0.29***
SPO proceeds during fiscal year ($m)	51.26	135.04	0.00	13.53	56.25	0.00	-37.73***
LT debt issued in fiscal year ($m)	180.22	515.78	0.00	220.97	592.38	0.00	40.75***
LT debt issued in fiscal year/TA	0.20	0.40	0.00	0.21	0.40	0.00	0.01
1-year Capex growth	0.06	0.69	-0.00	0.04	0.64	-0.01	-0.02
1-year R&D growth	0.22	0.52	0.20	0.09	0.46	0.09	-0.13***
Employees	2842.91	5358.17	985.00	2585.51	5239.94	749.00	-257.40
1-year Employee growth	-0.03	0.17	0.00	-0.03	0.17	0.00	0.00
Number of acquisitions during fiscal year	1.06	0.23	1.00	1.11	0.33	1.00	0.05
Value of acquisitions during fiscal year ($m)	262.41	697.16	43.13	151.71	493.85	40.70	-110.70
All cash acquisitions (%)	0.76	0.43	1.00	0.77	0.42	1.00	0.01
Observations		1968			6647		

Table A2: Do EGC firms manipulate their float?

Table presents probit estimates of the likelihood that an EGC firm will repurchase shares to manipulate its float and attempt to evade compliance with the "Large Accelerated Filer" (LAF) regulation. An EGC will lose its exemptions and become a LAF if its float exceeds $700 million on the last day of the most recent second fiscal quarter. The dependent variable in panel A is a dummy equal to one if the EGC firm initiates a share buyback program during the six months preceding the last day of the second fiscal quarter. The dependent variable in panel B is a dummy equal to one if the EGC firm initiates a share buyback program during the six months following the last day of the second fiscal quarter. *Float ≥ 700m* is a dummy equal to one if the firm's float is greater than or equal to $700 million exactly (i) six months before the end of most recent second fiscal quarter (Panel A), or, (ii) at the end of most recent second fiscal quarter (Panel B). We use three different bandwidths $h \in$ ($250 million, $300 million, $350million) around the LAF cutoff. Standard errors are clustered at the firm level and reported in parentheses. ***, **, and * denote significance at the 1%, 5%, and 10% level, respectively.

	Dependent Variable: Likelihood of Share Buybacks					
	Panel A: 0−6 months before end of 2nd fiscal quarter			Panel B: 0−6 months after end of 2nd fiscal quarter		
	$h = \$250m$	$h = \$300m$	$h = \$350m$	$h = \$250m$	$h = \$300m$	$h = \$350m$
	(1)	(2)	(3)	(4)	(5)	(6)
Float ≥ 700m	0.683**	0.730***	0.786***	0.346	0.168	0.321
	(0.312)	(0.256)	(0.233)	(0.413)	(0.339)	(0.321)
Log (Assets)$_{t-1}$	-0.302	-0.086	0.064	-0.024	0.003	0.007
	(0.303)	(0.287)	(0.265)	(0.277)	(0.274)	(0.267)
Log (Employees)$_{t-1}$	-0.099	-0.044	-0.030	-0.097	-0.060	-0.044
	(0.063)	(0.054)	(0.049)	(0.060)	(0.050)	(0.046)
Debt to Assets$_{t-1}$	0.091	0.094	-0.315	-0.037	0.251	0.124
	(0.749)	(0.685)	(0.685)	(0.683)	(0.747)	(0.706)
Cash to Assets $_{t-1}$	-3.430***	-1.860**	-1.682**	0.564	0.854	1.004
	(1.047)	(0.801)	(0.734)	(0.865)	(0.813)	(0.810)
Capex to Assets$_{t-1}$	3.717	3.436	4.010	0.073	-0.010	1.448
	(2.722)	(2.747)	(2.653)	(2.309)	(2.225)	(1.999)
R&D to Assets$_{t-1}$	0.988	0.939	0.930	3.411*	2.555	1.960
	(1.869)	(1.557)	(1.257)	(2.044)	(1.888)	(1.522)
Tobin's Q$_{t-1}$	0.041	0.001	-0.012	0.011	-0.021	-0.009
	(0.099)	(0.091)	(0.087)	(0.095)	(0.094)	(0.086)
Log (Age)$_{t-1}$	0.128	0.142	0.111	0.138	0.093	0.097
	(0.164)	(0.154)	(0.118)	(0.101)	(0.094)	(0.089)
Log (Board Size)$_{t-1}$	0.683	0.526	0.421	0.883*	0.644	0.626
	(0.702)	(0.577)	(0.482)	(0.515)	(0.518)	(0.478)
Board Independence$_{t-1}$	6.244**	5.881***	3.664**	4.293**	4.507***	3.444**
	(2.509)	(1.910)	(1.599)	(1.869)	(1.450)	(1.390)
Stock Market Return$_{t-1}$	0.612***	0.525***	0.396***	0.120	0.168**	0.143*
	(0.196)	(0.188)	(0.136)	(0.106)	(0.075)	(0.074)
Hot SPO Market	-0.599*	-0.352	-0.379*	-1.313***	-0.823*	-0.781
	(0.312)	(0.248)	(0.205)	(0.456)	(0.486)	(0.530)
Constant	-8.704**	-9.353***	-7.192**	-4.391	-5.261**	-4.574*
	(3.767)	(3.330)	(2.874)	(2.865)	(2.465)	(2.368)
Industry-Year FE	Y	Y	Y	Y	Y	Y
N	170	220	287	133	170	204
Pseudo R^2	0.422	0.360	0.346	0.247	0.232	0.220

Table A3. Summary Statistics: Equity and Debt Issuance

Tables below present various summary statistics of equity and debt issued by EGC firms in our sample. The sample comprises firms that went public as an "Emerging Growth Company" (EGC) between April 6, 2012 and April 30, 2019. See Section 3.1 for a detailed description of the sample construction. *EGC* refers to the firms that have float below $700 million and thus remain exempt from mandatory disclosure under Title I of the JOBS Act. *ExEGC* is a dummy equal to one for firms that have a float above $700 million and are thus subject to mandatory disclosure under the "Large Accelerated Filer" (LAF) regulation. Equity issuance (*New Equity*) is measured as the dollar value of common stock issued by the firm via seasoned public offers (SPOs) during a fiscal year. Data on SPOs is collected from Capital IQ and includes only offers that involve the sale of new primary stock independent of existing shareholders. In part (c) of panel A, summary statistics are reported at the transactional level per SPO. Debt issuance (*New Debt*) by the firm each year is the total annual long-term debt issued, and covers bonds, notes, lease obligations, debt reclassifications, and acquisition loans. This variable is computed from Compustat data item DLTIS. See Table A1 for a detailed description of the variables.

Panel A: New Equity

a)   Top 15 States

State	# SPO	% SPO	SPO amount issued ($m)	% SPO amount issued
California	313	27.75	34669.6	22.24
Texas	152	13.48	30246.75	19.4
Massachusetts	179	15.87	18575.71	11.91
North Carolina	58	5.14	9450.88	6.06
New York	51	4.52	7725.06	4.95
Colorado	30	2.66	7600.2	4.87
Pennsylvania	59	5.23	7318.58	4.69
Ohio	16	1.42	5262.82	3.38
Alabama	15	1.33	3674.73	2.36
Washington	23	2.04	3095.29	1.99
Maryland	28	2.48	2874.13	1.84
New Jersey	37	3.28	2789.23	1.79
Virginia	19	1.68	2455.87	1.58
Illinois	12	1.06	2326.12	1.49
Kansas	11	0.98	2194.92	1.41

b)   Top 15 Industries

SIC (2-digit)	Industry	# SPO	% SPO	SPO amount issued ($m)	% SPO amount issued
28	Chemicals and Allied Products	619	54.88	53244.24	34.15
73	Business Services	111	9.84	22833.42	14.64
13	Oil and Gas Extraction	57	5.05	18622.7	11.94
49	Electric, Gas and Sanitary Services	40	3.55	9771.65	6.27
46	Pipelines, Except Natural Gas	21	1.86	6999.35	4.49
87	Engineering, Accounting, and Management Services	17	1.51	5154.59	3.31
14	Mining and Quarrying of Nonmetallic Minerals	18	1.6	3910.52	2.51
35	Industrial Machinery and Computer Equipment	14	1.24	3716.83	2.38
38	Measuring, Photographic, Medical, & Optical Goods	53	4.7	3669.93	2.35
36	Electronic & Other Electrical Equipment & Components	31	2.75	3532.73	2.27
83	Social Services	12	1.06	3278.05	2.1
58	Eating and Drinking Places	17	1.51	2897.41	1.86
80	Health Services	14	1.24	2436.82	1.56
67	Holding and Other Investment Offices	9	0.8	2322.29	1.49
79	Amusement and Recreation Services	9	0.8	2187.57	1.4

c) Characteristics of Equity Issuance (SPO)

EGC	Min	10pc	25pc	50pc	Mean	75pc	90pc	Max	SD	Obs
Offer ($m)	5	14.1	38	78.78	115.83	148.56	259.04	1005.67	123.02	701
Direct Equity Costs (% offer)	0	0	0	0	2.71	0	14.8	29.75	6.84	661
Indirect Equity Costs (% offer)	-42.86	-0.83	0	5.85	7.72	12.77	21.43	49.69	10.49	647

ExEGC	Min	10pc	25pc	50pc	Mean	75pc	90pc	Max	SD	Obs
Offer ($m)	5	13.8	39.9	108.6	174.9	232.9	406.2	1740.9	209.2	427
Direct Equity Costs (% offer)	0	0	0	0	1.7	0	7	29.33	5.43	397
Indirect Equity Costs (% offer)	-40.8	0	0	1.92	3.62	6.68	10.83	34.04	6.72	414

Panel B: New Debt

EGC	Min	10pc	25pc	50pc	Mean	75pc	90pc	Max	SD	Obs.
LT Debt Issued ($m)	0	4.41	14.	47.47	160.59	161.66	408.38	2050	297.09	277
Before Tax Cost of Debt (%)	0.03	2.98	4.83	8.2	10.36	13.07	21.54	46.3	8.18	391
After Tax Cost of Debt (%)	0	0	0	3.89	5.68	8.15	13.63	41.96	7.28	391

ExEGC	Min	10pc	25pc	50pc	Mean	75pc	90pc	Max	SD	Obs.
LT Debt Issued ($m)	0.1	16	73.61	348.5	779.64	1133.48	2265.82	4981.5	998.6	422
Before Tax Cost of Debt (%)	0.08	2.12	3.92	6.09	7.39	9.27	13.09	46.18	5.95	579
After Tax Cost of Debt (%)	0	0	0.7	3.92	4.79	6.75	10.13	46.18	5.21	579

Table A4. Impact of EGC Status Loss on Fundraising: Tests for Larger Bandwidths

Table presents regression discontinuity (RD) estimates where the dependent variables are various measures of issuance. The OLS estimates are based on equation (1); the IV estimates are based on equations (2.1) and (2.2). In each panel, models (1) – (4) display results for *Log (New Equity)* defined as the natural logarithm of one plus the dollar value of common stock issued by the firm via seasoned public offers (SPOs) during a fiscal year. Models (5) – (8) for *New Equity* scaled by lagged total assets (*TA*). Models (9) – (12) for *Log (New Debt)* defined as the natural logarithm of one plus the dollar value of total long-term debt issued during a fiscal year. Models (13) – (16) for *New Debt* scaled by lagged total assets (*TA*). The sample comprises firms that went public as an "Emerging Growth Company" (EGC) between April 6, 2012 and April 30, 2019. See Section 3.1 for a detailed description of the sample construction. *ExEGC* is a dummy equal to one for firms having a float above $700 million at the end of second fiscal quarter that are subject to mandatory disclosure under the "Large Accelerated Filer" (LAF) regulation, and zero for firms whose float is below the threshold. The analysis is restricted to firms whose float is within a bandwidth $h \in$ ($300 million, $350million). For the IV regressions, *ExEGC* is the predicted treatment based on the first-stage model (2.1) using the variable *PF700* as an instrument. *PF700* is equal to one if the firm's float six months prior to the second fiscal quarter exceeds $700 million, and zero otherwise. In all regressions, industry and year fixed effects are included. Standard errors are clustered by firm and are reported in parentheses. ***, **, and * denote significance at the 1%, 5%, and 10% level, respectively. See Table A1 for a detailed description of the variables.

a) $h = \$300$ million

$h=300m$	Log(New Equity)				New Equity/Assets $_{t-1}$				Log(New Debt)				New Debt/Assets $_{t-1}$			
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)	(14)	(15)	(16)
ExEGC	1.254***	1.200***	0.304	0.223	0.273***	0.326***	-0.108	-0.036	0.447*	0.389	0.816	1.068*	0.140**	0.150**	0.256*	0.346**
	(0.234)	(0.253)	(0.553)	(0.600)	(0.068)	(0.062)	(0.138)	(0.130)	(0.242)	(0.249)	(0.577)	(0.589)	(0.069)	(0.071)	(0.140)	(0.152)
Controls	N	Y	N	Y	N	Y	N	Y	N	Y	N	Y	N	Y	N	Y
Industry FE	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y
Time FE	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y
Observations	431	366	431	366	363	363	363	363	431	366	431	366	354	354	354	354
R^2	0.194	0.258	0.156	0.219	0.212	0.422	0.129	0.353	0.313	0.364	0.309	0.350	0.224	0.272	0.214	0.246
First-stage R^2			0.232	0.262			0.253	0.266			0.232	0.262			0.251	0.261
First Stage F-stat			87.604	59.151			83.95	54.093			87.604	59.151			83.742	52.102

b) $h = \$350$ million

$h=350m$	Log(New Equity)				New Equity/Assets $_{t-1}$				Log(New Debt)				New Debt/Assets $_{t-1}$			
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)	(14)	(15)	(16)
ExEGC	1.267***	1.174***	0.615	0.343	0.302***	0.362***	0.009	0.088	0.442*	0.402*	0.783	1.014*	0.140**	0.135**	0.257**	0.322**
	(0.222)	(0.236)	(0.484)	(0.553)	(0.067)	(0.061)	(0.123)	(0.121)	(0.230)	(0.236)	(0.509)	(0.537)	(0.068)	(0.066)	(0.130)	(0.138)
Controls	N	Y	N	Y	N	Y	N	Y	N	Y	N	Y	N	Y	N	Y
Industry FE	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y
Time FE	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y
Observations	521	438	521	438	435	435	435	435	521	438	521	438	435	435	435	435
R^2	0.170	0.258	0.153	0.231	0.191	0.430	0.143	0.392	0.300	0.346	0.296	0.334	0.245	0.303	0.236	0.282
First-stage R^2			0.268	0.305			0.292	0.312			0.268	0.305			0.291	0.308
First Stage F-stat			122.496	76.695			110.239	68.702			122.496	76.695			109.678	66.595

Table A5. EGC Fundraising by Listing Year: Tests for Smaller Bandwidths

Table presents OLS regression estimates based on equation (1) where the dependent variables are various measures of issuance. *New Equity (D)* is a dummy equal to one if the firm issued new equity via seasoned public offers (SPOs) during a fiscal year. *New Debt (D)* is a dummy equal to one if the firm issued log-term debt during a fiscal year. The sample comprises firms that went public as an "Emerging Growth Company" (EGC) between April 6, 2012 and April 30, 2019. See Section 3.1 for a detailed description of the sample construction. The analysis is performed at various levels of the bandwidth $h \in$ [$150 million, $300million] of the float with respect the LAF treatment cutoff. *ExEGC* is a dummy equal to one for firms having a float above $700 million at the end of second fiscal quarter that are subject to mandatory disclosure under the "Large Accelerated Filer" (LAF) regulation, and zero for firms whose float is below the threshold. The variable *Listing Age* is split into individual year dummies. In all regressions, industry-year fixed effects are included. Standard errors are clustered by firm and reported in parentheses. ***, **, and * denote significance at the 1%, 5%, and 10% level, respectively. See Table A1 for a detailed description of the variables.

	New Equity (D)				New Debt (D)			
	h=$150m	h=200m	h=250m	h=300m	h=$150m	h=200m	h=250m	h=300m
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
t = IPO year + 1	-0.051	-0.041	0.024	0.069	0.155	0.109	0.012	0.079
	(0.195)	(0.162)	(0.154)	(0.108)	(0.178)	(0.130)	(0.117)	(0.113)
t = IPO year + 2	0.143	-0.032	-0.030	-0.101	0.233	0.346*	0.040	0.020
	(0.282)	(0.212)	(0.203)	(0.131)	(0.267)	(0.191)	(0.165)	(0.116)
t = IPO year + 3	-0.360*	-0.414**	-0.328**	-0.275***	0.273	0.310*	0.112	0.009
	(0.192)	(0.170)	(0.142)	(0.105)	(0.226)	(0.170)	(0.161)	(0.131)
t = IPO year + 4	0.166	-0.008	0.062	0.008	0.056	-0.048	-0.025	0.002
	(0.266)	(0.178)	(0.160)	(0.112)	(0.238)	(0.149)	(0.164)	(0.138)
t = IPO year + 5	0.258	0.118	0.182	0.148	-0.515	-0.163	-0.268***	-0.241*
	(0.293)	(0.240)	(0.214)	(0.188)	(0.330)	(0.124)	(0.102)	(0.123)
t = IPO year + 6	0.188	-0.294	0.412**	0.399***	-1.057***	-1.025***	-0.406***	-0.354***
	(0.307)	(0.182)	(0.179)	(0.128)	(0.272)	(0.154)	(0.127)	(0.107)
ExEGC	0.048	-0.036	0.097	0.083	0.191	0.166	0.008	0.018
	(0.177)	(0.144)	(0.150)	(0.131)	(0.235)	(0.148)	(0.152)	(0.141)
t = IPO year + 1 × ExEGC	0.095	0.077	-0.014	-0.051	-0.144	-0.126	0.056	0.007
	(0.235)	(0.168)	(0.172)	(0.157)	(0.262)	(0.173)	(0.177)	(0.160)
t = IPO year + 2 × ExEGC	-0.233	-0.059	-0.110	-0.029	-0.313	-0.465**	-0.095	-0.097
	(0.305)	(0.230)	(0.224)	(0.180)	(0.332)	(0.211)	(0.217)	(0.177)
t = IPO year + 3 × ExEGC	0.314	0.382	0.244	0.241	-0.418	-0.412**	-0.183	-0.049
	(0.277)	(0.264)	(0.222)	(0.159)	(0.291)	(0.197)	(0.202)	(0.166)
t = IPO year + 4 × ExEGC	-0.159	0.021	-0.124	-0.031	-0.127	-0.037	-0.003	0.003
	(0.333)	(0.185)	(0.176)	(0.132)	(0.290)	(0.175)	(0.185)	(0.160)
t = IPO year + 5 × ExEGC	-0.370	-0.061	-0.073	-0.008	0.320	-0.003	0.224	0.267
	(0.269)	(0.274)	(0.217)	(0.177)	(0.468)	(0.183)	(0.186)	(0.179)
t = IPO year + 6 × ExEGC	0.000	0.000	0.000	-0.632***	0.000	0.000	0.000	1.159***
	(.)	(.)	(.)	(0.147)	(.)	(.)	(.)	(0.157)
Constant	-1.182*	-0.101	0.134	0.168	2.305***	1.647***	0.214	0.438
	(0.650)	(0.374)	(0.317)	(0.315)	(0.529)	(0.533)	(0.645)	(0.547)
Firm & Macro Controls	Y	Y	Y	Y	Y	Y	Y	Y
Industry/Year FE	Y	Y	Y	Y	Y	Y	Y	Y
Observations	383	460	557	662	383	460	557	662
Adjusted R^2	0.567	0.549	0.522	0.496	0.631	0.611	0.562	0.538

Table A6. Which Investments Affect Growth Opportunities?

Table presents OLS regression discontinuity (RD) estimates where the dependent variable measures growth opportunities. The OLS estimates are based on equation (1). The dependent variable is the firm's Tobin's q each year. We explore which investment policies (internal and external) affect future growth opportunities. The sample comprises firms that went public as an "Emerging Growth Company" (EGC) between April 6, 2012 and April 30, 2019. See Section 3.1 for a detailed description of the sample construction. *ExEGC* is a dummy equal to one for firms having a float above $700 million at the end of second fiscal quarter that are subject to mandatory disclosure under the "Large Accelerated Filer" (LAF) regulation, and zero for firms whose float is below the threshold. To minimize the effect of confounding factors, the analysis is restricted to firms whose float is within a bandwidth h = $250 million around the LAF cutoff. In all regressions, industry and year fixed effects are included. Standard errors are clustered by firm and reported in parentheses. ***, **, and * denote significance at the 1%, 5%, and 10% level, respectively. See Table A1 for a description of the variables.

	Tobin's q					
	(1)	(2)	(3)	(4)	(5)	(6)
ExEGC	0.586*	0.556**	0.593**	0.544*	0.529*	0.480
	(0.235)	(0.197)	(0.206)	(0.228)	(0.226)	(0.243)
Internal Investments						
Capex/Sales	0.527					
	(1.386)					
ExEGC × Capex/Sales	-1.096					
	(1.321)					
PPE/Sales		0.014				
		(0.240)				
ExEGC × PPE/Sales		-0.252				
		(0.463)				
R&D/Sales			-0.005			
			(0.008)			
ExEGC × R&D/Sales			-0.106**			
			(0.033)			
External Investments						
Acquisition (D)				1.342***		
				(0.304)		
ExEGC × Acquisition (D)				-0.764		
				(0.904)		
Log (Acquisition Value)					0.288***	
					(0.050)	
ExEGC × Log (Acquisition Value)					-0.156	
					(0.200)	
All Cash Acquisition (D)						1.007
						(0.785)
ExEGC × All Cash Acquisition (D)						-0.352
						(1.505)
Controls	Y	Y	Y	Y	Y	Y
Industry/Year FE	Y	Y	Y	Y	Y	Y
Observations	197	197	197	197	197	197
Adjusted R^2	0.533	0.533	0.541	0.542	0.542	0.535

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B. Impact of the JOBS Act on US equity issuance: International evidence

To understand the extent to which the JOBS Act affected seasoned public offering (SPO) activity in US public markets, we compare US SPO activity (the *treated* group) against an international *control* sample. Data for the international sample is obtained from Capital IQ, and covers nine countries with the largest and most liquid public equity markets comparable to the US: Canada, United Kingdom, France, Germany, Italy, Australia, Japan, Hong Kong, and Singapore. We apply the methodology described in section 3.1 and restrict the international control sample to firms with annual revenue below $1 billion.

Panel (a) of Figure B1 shows that prior to the JOBS Act, US SPO volume (deals per quarter) followed a trend very similar to SPO activity in the international markets. However, the mean quarterly US SPO volume has risen sharply by an average of 231% since April 2012 relative to the pre–JOBS period. This increase is also substantially larger compared to quarterly SPO volume in the international control sample, which has remained relatively flat since 2007 (except for a temporary dip during the great financial crisis). This difference in trends between the treated and control groups provides strong evidence that the growth in US SPO activity following the JOBS Act is economically significant. Panel (b) compares SPO activity among US firms that went public as an "Emerging Growth Company" (EGC) and US NonEGC firms that went public before the Act and do not qualify for its provisions. We see that SPO activity among EGC firms has been rising steadily over time (both in absolute and percentage terms) compared to NonEGC firms.

Table B1 presents descriptive statistics of SPOs by US firms with revenue below $1 billion in the period surrounding the JOBS Act. Panel A compares SPO offer and issuer characteristics in the pre– (January 1, 2000 – April 4, 2012) and post–JOBS periods (April 6, 2012 – December 31, 2017). SPOs after the Act raised, on average, $17 million more than similar offers before the Act, and are underwritten by larger syndicates. The duration between filing and completion (withdrawal) of an SPO reduced by 77% to a mean of just 8.8 days after the Act. This suggests that the *de-risking* provisions of the JOBS Act (Dambra, Field and Gustafson, 2015), which permit EGCs to file offers confidentially and to communicate with institutional investors before filing, are enabling faster completion (withdrawal) of the offer. Fees charged by underwriters for servicing SPOs increased by only 0.47% after Title I, possibly because the underlying stock

is already trading and requires fewer underwriting efforts than, say, IPOs. However, underpricing increased by 8.4% on average. For the mean post-JOBS SPO with $78.5 million in gross proceeds, the increase in underpricing translates to $6.57 million in mean forgone proceeds. One possible explanation for the greater underpricing is that fewer disclosures made by EGC firms impedes price discovery. The extra money left on the table is therefore meant to compensate investors for this information asymmetry. Panel B compares the characteristics of US SPOs and their issuers in the period following the Act. EGCs raise less money from SPOs relative to NonEGC firms that went public before the Act and do not qualify for its exemptions. EGCs also leave up to 3.6% more money on the table on average (relative to offer size) compared to NonEGCs. The mean EGC is also 9 years younger, and smaller in size, revenue, and employees compared to the mean NonEGC firm.

To estimate the causal effect of the JOBS Act on US SPO activity, we begin by estimating the following event-study specification:

$$Y_{ijt} = \alpha + \sum_{k=-24,k\neq-1}^{24} \beta_k [treated_i \times \mathbb{I}(t=k)] + \mu_j + \nu_t + \varepsilon_{ijt} \tag{B.1}$$

where Y_{ijt} is a measure of SPO activity in region i within industry j in year-quarter t. SPO activity is estimated per region-industry-quarter as (i) number of SPOs scaled by total number of publicly listed firms (*SPO volume*), and (ii) gross SPO proceeds scaled by total stock market capitalization (*SPO proceeds*). $Treated_i$ is a dummy equal to one if the region i is the US, and zero if i is rest of the world (RoW) or any other non-US region. The coefficients of interest are the β_k terms, which tell us whether and when the JOBS Act had a significant impact on SPO activity in the treated group (US), relative to the control group. Our hypothesis is that these coefficients will be significantly greater than zero for $k \geq 0$ (i.e., quarters after the JOBS Act) and not different to zero for $k < 0$ (i.e., quarters before the JOBS Act). We set $\beta_k = 0$ for $k = -1$, denoting the baseline parameter against which the other coefficients are estimated. Our event window starts 24 quarters before the JOBS Act took effect, and ends 24 quarters afterward. The other terms in the above equation are industry and year-quarter fixed effects, and a constant term α. The error term ε_{ijt} is normally distributed and assumed to be

uncorrelated with the main regressors.

Figure B2 shows clear effects of the JOBS Act on US SPO volume, but not in US SPO proceeds. Panel (a) shows that the JOBS Act led to a 2.1% increase in US SPO volume in the quarter after the Act went into effect ($k = 1$). This increase is persistent and relatively stable during subsequent quarters. In contrast, there is no change in aggregate proceeds raised from SPOs by US issuers following the Act. Panels (b) and (c) show similar event-study estimates for alternative control samples based on specific sub-regions (Canada/European Union in panel (b), Asia-Pacific in panel (c)). The results are consistent to those obtained in panel (a).

Extant literature shows that greater information uncertainty and the decline in issuer quality are two major factors that contributed to a rise in IPO underpricing after the JOBS Act. An early study by Barth, Landsman and Taylor (2017) notes that EGCs mitigate this uncertainty by voluntarily disclosing more information post IPO. If such initiatives successfully reduce information asymmetry, then follow-on offers by EGCs should not be more underpriced compared to similar offers made by NonEGC firms. Conversely, if voluntary disclosure does not resolve the uncertainty associated with an EGC firm, then investors will demand greater compensation (in the form of more underpricing) to fund a follow-on offer by that firm.

To test these hypotheses, we compare SPOs in the US to SPOs in other international markets in the period surrounding the JOBS Act. Our identification strategy relies on the argument that US SPOs, particularly those conducted by EGC firms, are likely to be impacted by the Act whereas similar offers in foreign markets are unlikely to affected by the Act's passage.

To create a relevant sample for empirical analysis, we match each US SPO in our sample to a control group of three nearest NonUS SPOs from our international sample. The matching is done using the propensity scores (PS) method that compares various observable characteristics of issuers in the treated and control groups. For each set of acceptable matches, we impose an additional restriction that the matching is done in the same offer year and period (i.e., matched US and NonUS IPOs both occur pre-JOBS, or both occur post-JOBS), and among issuers within the same two-digit SIC industry. To minimize bias, we also restrict the sample to maintain similar calendar length before (January 1, 2008 t*o* April 4, 2012) and after (April 6, 2012 and December 31, 2017) the Act. Table B3 shows that the matched US and NonUS SPOs have no significant differences in observable characteristics (see Table B3).

Our analysis is based on the following difference-in-differences specification:

$$SPO\ Underpricing = \gamma_1[POST \times US\ Issuer] + \gamma_2[POST \times US\ Issuer \times EGC]$$
$$+ \gamma_3 X' + \mu_i + \delta_j + \lambda_t + \varepsilon_{ijt}$$

(B.2)

where the outcome variable *SPO underpricing* follows from Corwin (2003), and is estimated as minus one times the difference between previous day's closing price and the SPO offer price, scaled by the previous day's closing price. This variable is equivalent to *Indirect Equity Costs* mentioned in Section 3.1 and Table A3. The first independent variable of interest is the interaction term $POST \times US\ Issuer$ that captures potential changes in the underpricing of US SPOs vis-à-vis similar offers in other markets. We also include a triple interaction $POST \times US\ Issuer \times EGC$, which serves to differentiate between EGC and NonEGC firms that are both active in the US SPO market in the aftermath of the JOBS Act. X denotes a set of observable controls for issuer as well as country-specific economic and stock market characteristics. Lastly, the regressions include country, industry, and year fixed effects with robust standard errors.

Table B4 presents difference-in-differences estimates of the JOBS Act's impact on US SPO underpricing based on equation (B.2). The coefficients of $POST \times US\ Issuer$ are consistently positive and significant, implying a general increase in the underpricing of US SPOs relative to other foreign markets following Title I. The positive and highly significant interaction term $POST \times US\ Issuer \times EGC$ suggests that EGCs pay about 14.5% more in terms of underpricing than other NonEGC issuers raising capital in the US SPO market. This is equivalent to about $15.4 million in forgone proceeds for the mean SPO by an EGC.

Overall, these findings show that EGC firms pay more to raise follow-on equity in US public markets. We also conclude from these results that any post IPO voluntary disclosure made by EGC firms does not help in lowering their public equity issuance costs.

Figure B1. SPO activity around the JOBS Act

Panel (a) compares quarterly volume of secondary public equity offers (SPOs) in the US versus rest of the world (RoW) comprising nine countries with the largest and most liquid public equity markets: Canada, United Kingdom, France, Germany, Italy, Australia, Japan, Hong Kong, and Singapore. The US and RoW SPO samples are constructed from Capital IQ based on the methodology described in Section 3.1. Panel (b) compares SPO activity between US firms that went public as an "Emerging Growth Company" (EGC) and RoW. The sample period is from April 6, 2012 to April 30, 2019.

a) US versus other developed countries
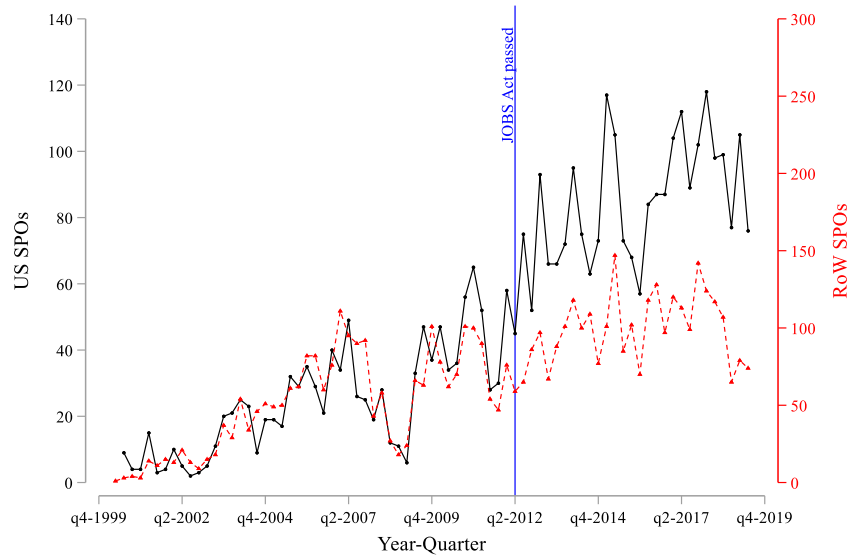
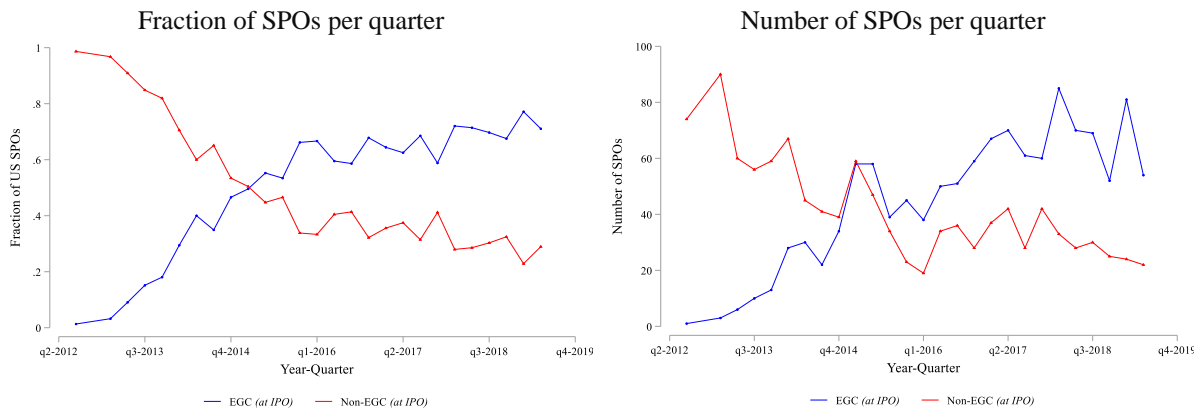### b) US SPO activity: EGC versus NonEGC firms

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Figure B2. JOBS Act and SPO activity: US versus developed countries

Figures plot the coefficients from an event study analysis on the effect of the JOBS Act on US SPO activity. The regression specification used for this analysis is as follows:

$$Y_{ijt} = \alpha + \sum_{k=-24, k \neq -1}^{24} \beta_k [treated_i \times \mathbb{I}(t = k)] + \mu_j + \nu_t + \varepsilon_{ijt}$$

where Y_{ijt} is a measure of SPO activity in region i within industry j in year-quarter t. SPO activity is estimated per region-industry-quarter as (i) number of SPOs scaled by total number of publicly listed firms, and, (ii) gross SPO proceeds scaled by total stock market capitalization. $Treated_i$ is a dummy equal to one if the region i is the US, and zero if i is rest of the world (RoW) or any other non-US regions. The coefficients of interest are the β_k terms, which tell us whether and when the JOBS Act had a significant impact on SPO activity in the treated group (US), relative to the control group. Our hypothesis is that these coefficients will be significantly greater than zero for $k \geq 0$ (i.e., quarters after the JOBS Act) and not different to zero for $k < 0$ (i.e., quarters before the JOBS Act). We set $\beta_k = 0$ for $k = -1$, representing the baseline parameter against which the other coefficients are estimated. Our event window starts 24 quarters before the JOBS Act took effect, and ends 24 quarters afterward. The other terms in the above equation are industry and year-quarter fixed effects, and a constant term α. The error term ε_{ijt} is normally distributed and assumed to be uncorrelated with the main regressors. See the introduction to Appendix B for a description of the sample construction. Vertical bands represent 90% confidence intervals. Standard errors are clustered at the two-digit SIC industry level.

a)   US versus RoW
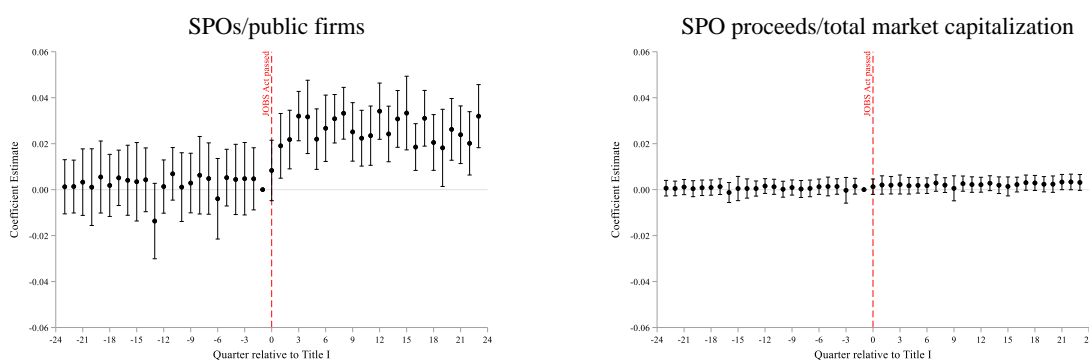
b)   US versus Canada/European Union
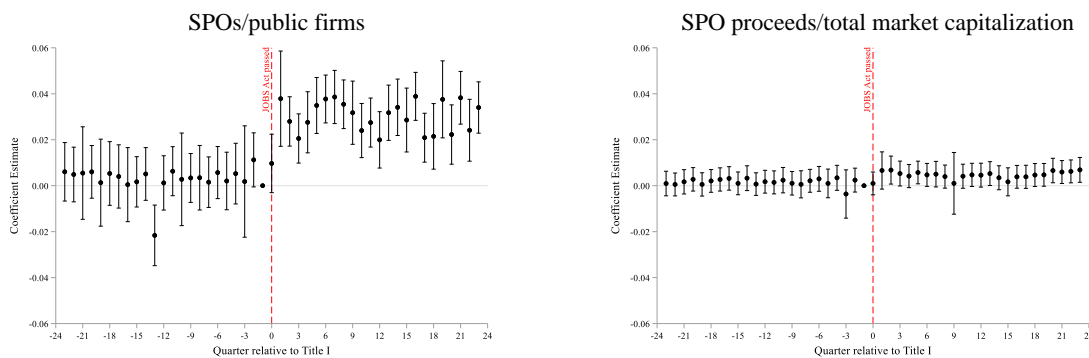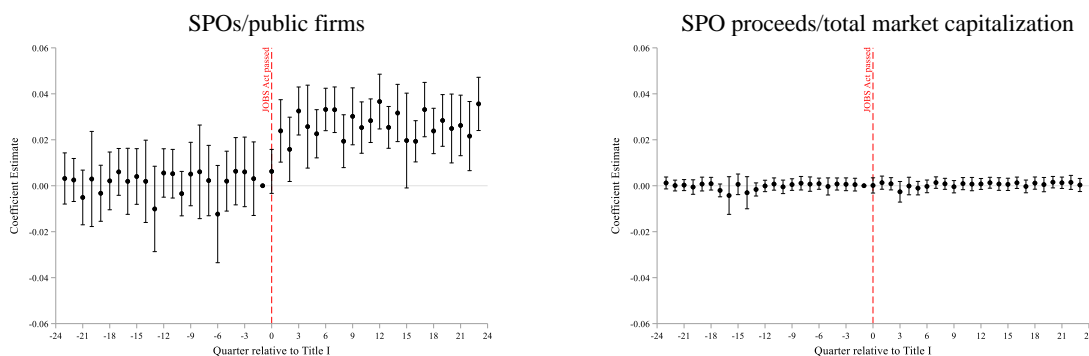

c)   US versus Asia-Pacific

Table B1. Summary statistics: US SPOs

Table presents descriptive statistics on secondary public equity offers (SPOs) by firms with gross revenue below $1 billion in the period surrounding the JOBS Act. See the introduction to Appendix B for a description of the sample construction. To minimize bias, we restrict the sample to maintain similar calendar length before (January 1, 2008 to April 4, 2012) and after (April 6, 2012 and December 31, 2017) the JOBS Act. Panel A compares offer and issuer characteristics for SPOs during the pre– and post–JOBS periods. Panel B compares offer and issuer characteristics for SPOs in the post–JOBS periods only between EGC and NonEGC firms. EGC firms are those that qualify for exemptions from mandatory disclosure under Title I of the JOBS Act for up to five years of the IPO. NonEGC firms are those that went public before the JOBS Act and do not qualify for such exemptions. Values are rounded to the nearest decimal for brevity. Test statistics are computed using the *t*-test for a significant change in means. ***, **, and * indicate that the difference in means is significant at the 1%, 5%, and 10% level, respectively.

a) Pre– versus Post–JOBS

Panel A: Seasoned public offerings (SPO)	Pre–JOBS (Q1'00 − Q1'12)			Post–JOBS (Q2'12 – Q4'17)			Difference in means	
	Mean	SD	Median	Mean	SD	Median	Post- vs. Pre JOBS	
Deal characteristics								
Offer value ($m)	61.6	73.7	37	78.5	105.9	40	16.96	***
Waiting period (days)	37.6	134.7	7	8.8	26.6	0	-28.82	***
Syndicate size	2.5	2.5	2	3.5	3.5	3	1.03	***
Underwriter fees (%)	5.1	1.4	5.3	5.6	1.4	6	0.47	***
Legal fees (%)	0.5	0.7	0.3	1.3	1.7	0.8	0.74	***
Underpricing (1-day return %)	1.59	22	4.3	9.9	17.3	8	8.38	***
Time since previous offer (months)	40.7	137.1	16	19.2	81.6	12	-21.56	***
Issuer characteristics								
Issuer age (years)	21.4	35.3	16	18.3	29	16	-3.08	***
Total assets ($m)	347	522.6	121.5	327.8	555.2	100.2	-19.23	
Total revenue ($m)	130.1	227.6	26.3	107.3	367	13.1	-22.79	*
Employees	611.8	1365.3	144	359.1	1245.3	82	-252.70	***
No. offers		2136			1071			

b) EGC versus NonEGC firms (*Q2'2012 – Q4'2017*)

Panel A: Seasoned public offerings (SPO)	NonEGC firms			EGC firms			Difference in means	
	Mean	SD	Median	Mean	SD	Median		
Deal characteristics								
Offer value ($m)	136.1	157.5	63.8	106	117	65.1	-30.04	*
Waiting period (days)	11.4	45.7	0	9.6	29.1	0	-1.79	
Syndicate size	4.6	4.2	3	4.1	3.3	4	-0.48	
Underwriter fees (%)	5.2	1.4	6	5.3	1.5	6	0.1	
Legal fees (%)	1.3	2.1	0.6	0.8	1	0.4	-0.54	
Underpricing (1-day return %)	5.9	13.9	5	9.5	16	7.9	3.56	***
Time since previous offer (months)	15.1	14.6	11	12.5	9	10	-2.64	*
Issuer characteristics								
Issuer age (years)	19.2	26.5	11	10	6.7	9	-9.11	***
Total assets ($m)	825	1204.3	131.8	482.5	870.2	168.6	-342.52	**
Total revenue ($m)	457.8	984.7	15.2	136.4	666.3	8.5	-321.31	***
Employees	495.7	1334.4	69	232.6	761	73.5	-263.19	*
No. offers		230			841			

Table B2. JOBS Act and SPO activity: US versus developed countries

Table presents OLS difference-in-differences estimates of the effects of the JOBS Act on country-level SPO activity per year-quarter. See the introduction to Appendix B for a description of the sample construction. To minimize bias, we restrict the sample to maintain similar calendar length before (January 1, 2008 to April 4, 2012) and after (April 6, 2012 and December 31, 2017) the JOBS Act. The dependent variables in Panel A is the quarterly number of SPOs scaled by the total number of publicly listed firms in a given country. The dependent variables in Panel B is the quarterly proceeds from SPOs scaled by the market capitalization of all public firms in a given country. *US* is dummy indicator equal to one if the country in question is the US, and zero otherwise. *Post JOBS* is a dummy variable equal to one if the offer was issued in the period following Title I (i.e. between April 5, 2012 and December 31, 2017, and zero if the offer was issued in the prior period (i.e. between January 1, 2008 and April 4, 2012). *Stock return$_{t-1}$* is the lagged annual return compounded monthly for a given country in the 12-month period prior to the given quarter. *GDP growth$_{t-1}$* is the lagged annual change in gross domestic product (GDP) at the end of the most recent calendar year, estimated in percentage terms. *Country MTB* is the mean of the Fama-French industry median market-to-book ratios in a given country-quarter, and is based on Doidge, Karolyi and Stulz (2013). All the specifications include country and time (year-quarter) fixed effects. Standard errors are clustered by time and reported in parentheses. ***, **, and * denote significance at the 1%, 5%, and 10% level, respectively.

	Panel A: SPOs / Public Firms			
	US vs RoW	US vs RoW	US vs Canada/EU	US vs Asia-Pacific
	(1)	(2)	(3)	(4)
US x Post JOBS	0.164***	0.136***	0.162***	0.158**
	(0.031)	(0.039)	(0.045)	(0.061)
Stock Return$_{t-1}$		0.025	0.040	0.377
		(0.172)	(0.165)	(0.388)
GDP Growth$_{t-1}$		-0.613	2.251	-2.373*
		(0.746)	(1.634)	(1.387)
Country MTB		0.092**	-0.399***	-0.077
		(0.045)	(0.125)	(0.144)
Constant	0.349***	0.213	1.237***	0.498
	(0.033)	(0.147)	(0.335)	(0.323)
Country FE	Y	Y	Y	Y
Year-Quarter FE	Y	Y	Y	Y
Country x Stock Return$_{t-1}$	N	Y	Y	Y
Country x MTB	N	Y	Y	Y
Adjusted R^2	0.037	0.477	0.650	0.429
Observations	384	339	174	209

	Panel B: SPO Gross Proceeds / Total Market Capitalization			
	US vs RoW	US vs RoW	US vs Canada/EU	US vs Asia-Pacific
	(5)	(6)	(7)	(8)
US x Post JOBS	0.008**	0.005	0.004	0.003
	(0.004)	(0.005)	(0.010)	(0.006)
Stock Return$_{t-1}$		-0.007	-0.024	0.021
		(0.018)	(0.049)	(0.026)
GDP Growth$_{t-1}$		0.002	0.317	0.002
		(0.122)	(0.271)	(0.183)
Country MTB		0.002	-0.022	0.005
		(0.005)	(0.026)	(0.017)
Constant	0.030***	0.042**	0.086	0.036
	(0.003)	(0.018)	(0.081)	(0.040)
Country FE	Y	Y	Y	Y
Year-Quarter FE	Y	Y	Y	Y
Country x Stock Return$_{t-1}$	N	Y	Y	Y
Country x MTB	N	Y	Y	Y
Adjusted R^2	0.009	0.351	0.281	0.358
Observations	384	339	174	209

Table B3. Propensity score matching: covariate balances for SPO underpricing regressions: US versus developed countries

Table reports tests of covariate balance between US issuers (the *treated* group) and non-US issuers (the *control* group) of secondary public equity offers (SPOs). See the introduction to Appendix B for a description of the sample construction. To minimize bias, we restrict the sample to maintain similar calendar length before (January 1, 2008 t*o* April 4, 2012) and after (April 6, 2012 and December 31, 2017) the JOBS Act. Each US SPO is matched to a control group of three nearest non-US SPOs using propensity scores based on observable issuer characteristics. The sample of non-US SPOs covers nine developed economies that have large and highly liquid public equity markets: Canada, United Kingdom, France, Germany, Italy, Australia, Japan, Hong Kong, and Singapore. For each set of matches, we impose an additional restriction that matching is done within the same offer year and period (i.e., matched US and non-US IPOs both occur pre-JOBS, or both occur post-JOBS), and among issuers within the same two-digit SIC industry. *t-stat* indicates the difference in means between the variables of interest across the treated and control samples, while the *p-value* indicates statistical significance of the difference in means between the two matched samples.

Variable	Mean (Treated)	Mean (Control)	t-stat	p-value
Total Revenue	278.97	284.08	-0.48	0.629
Total Assets	590.69	571.01	0.74	0.461
Long-term Debt	213.06	196.57	1.36	0.173
Capital Expenditures	1991.1	2128.7	0.32	0.746
Inventories	1447	1634.3	0.49	0.622

Table B4. Effect of the JOBS Act on SPO underpricing: US versus developed countries

Table presents OLS estimates of the effect of the JOBS Act on SPO underpricing (*Indirect Equity Costs*). The dependent variable, *SPO underpricing*, is estimated as minus one times the difference between previous day's closing price and the SPO offer price, divided by the previous day's closing price. See the introduction to Appendix B for a description of the sample construction. To minimize bias, we restrict the sample to maintain similar calendar length before (January 1, 2008 t*o* April 4, 2012) and after (April 6, 2012 and December 31, 2017) the JOBS Act. The sample is obtained through a propensity score matching of US and NonUS SPOs based on observable pre-offer issuer characteristics as shown in Table B3. *Post JOBS* is a dummy variable equal to one if the SPO was issued in the period following the Act, and zero if the offer was issued in the prior period. *US Issuer* is a dummy term equal to one if issuer is domiciled in the US. *EGC* is a dummy term equal to one if the issuer went public as an "Emerging Growth Company" under the provisions of Title I of the JOBS Act. *GDP growth* is the quarter on quarter (QoQ) growth rate in real gross domestic product (GDP) of a country. *Market cap (% GDP)* is the market capitalization of all publicly listed firms in a sample country expressed as percentage of the gross domestic product at the end of the most recent calendar year. *Stock return (%)* is the monthly compounded stock market return for a sample country during the most recent twelve months. All specifications include country, industry and time (year-quarter) fixed effects. Robust standard errors are reported in parentheses. ***, **, and * denote significance at the 1%, 5%, and 10% level, respectively.

	(1)	(2)	(3)	(4)
Post JOBS x US Issuer	0.091***	0.076***	0.075***	0.059***
	(0.010)	(0.010)	(0.010)	(0.011)
Post JOBS x US Issuer x EGC			0.092***	0.086***
			(0.031)	(0.026)
EGC			-0.038	-0.031
			(0.028)	(0.022)
Log (Total assets)		-0.008**		-0.007**
		(0.004)		(0.004)
Debt to assets		0.013		0.015
		(0.014)		(0.014)
Profitability (EBITDA)		-0.014		-0.015
		(0.016)		(0.017)
Log (Offer size)		-0.005		-0.006*
		(0.003)		(0.003)
GDP growth$_{t-1}$		0.807**		0.814**
		(0.372)		(0.372)
Market cap (% GDP)		0.005***		0.005***
		(0.001)		(0.001)
Stock return$_{t-1}$		0.198***		0.201***
		(0.044)		(0.044)
Constant	0.019	0.042	0.024	0.047
	(0.092)	(0.081)	(0.097)	(0.086)
Country/Industry/Year FE	Y	Y	Y	Y
Observations	3735	3595	3735	3595
Adjusted R^2	0.449	0.456	0.452	0.458

C. Supplementary information on the JOBS Act

Table C1. Detailed timeline of the JOBS Act's passage

Table presents the timeline of events associated with the enactment of the JOBS Act by the US government. Details are obtained from Morrison and Foerster LLP (2016), the US Securities and Exchange Commission (SEC), and http://www.govtrack.us.

Event	Dates	Description
	Mar 14, 2011	Bill H.R.1070 titled "Small Company Capital Formation Act of 2011" introduced by Representative David Schweikert in the US House of Representatives, seeking to amend the Securities Act by increasing the capital limit on public equity offerings by small companies from $5 million to $50 million. Additional bills introduced around the same time seeking to increase the threshold for mandatory registration as a public company from 500 to 2,000 shareholders, and permit the general solicitation and advertising private placements that are exempt from registration as securities under Regulation D.
	Nov 2, 2011	Bill H.R.1070 passed by the House and referred to the US Senate.
	Dec 1, 2011	Bill H.R.1070 introduced as bill H.R. 3606 in the Senate under the title "Reopening American Capital Markets to Emerging Growth Companies Act of 2011" by Senator Charles Schumer.
	Jan 31, 2012	US President Barack Obama releases the "Startup America Legislative Agenda" to the US Congress, expressing strong support for adopting the IPO on-ramp provisions recommended by the SEC and a host of other policies (crowdfunding, Regulation A etc.) aimed at boosting capital formation by smaller companies.
	Mar 22, 2012	Bill H.R.3606 passed into law, and is henceforth known as the "Jumpstart Our Business Startups" (JOBS) Act.
1	**Apr 5, 2012**	**The JOBS Act is signed into law by President Obama; Title I of the Act with its "IPO on-ramp" provisions is effective immediately.**
		Title I reduces the mandatory disclosure and registration requirements of IPOs for firms with annual gross revenues below $1 billion by designating them as emerging growth companies (EGC). Firms that qualify as an EGC and maintain this status can take advantage of the following provisions:

- **Seek confidential review of draft registration statements by the SEC (confidential registration statements must be made publicly available at least 15 days before the commencement of the roadshow).**
- **Can "test the waters" by engaging in oral or written communication with accredited investors and qualified institutional buyers (QIB) at any time before or after filing the initial registration statements.**
- **Are required to include only two years of audited financial statements, instead of three, as part of the initial registration statements.**
- Are not subject to say-on-pay rules required under the Dodd-Frank Act.
- Must disclose the compensation of three instead of five executive offers, and only for the two previous fiscal years.
- Are exempt from auditor attestation as required under the Sarbanes-Oxley Act section 404(b).

- Can be covered by research analysts during the pre-offer period, including by those affiliated with the participating underwriters and broker-dealers.

EGC firms can qualify for Title I exemptions when making secondary public equity offers for up to five years after the IPO as long as:
- **Annual gross revenue is below $1 billion ($1.07 billion since April 1, 2017 due to inflation adjustments by the SEC).**
- No more than $1 billion issued as non-convertible debt in the three previous years.
- Is not a "large accelerated filer" with a public equity float of $700 million or more as defined by the Exchange Act Rule 12b-2.

Title V of the JOBS Act, which raises the limit on the number of shareholders in a company from 500 to 2,000 before it is required to register as a public company with the SEC, is also effective immediately.

	Jul 13, 2013	SEC adopts final amendments to Rule 506 and Rule 144a, as directed under Title II of the JOBS Act, to eliminate the general ban on solicitation and advertising of private placements issued under Regulation D. The SEC introduces a new Rule 506(c) under which firms can raise private capital by soliciting accredited investors.
2	**Sep 23, 2013**	**Title II of the JOBS Act becomes effective.**
	Jun 19, 2015	Title IV of the JOBS Act is effective. Dubbed the "mini-IPO" rule, Title IV amends Regulation A and allows firms to raise up to $50 million from accredited and non-accredited investors, seek confidential review of registration statements, and testing-the-waters to gauge investor interest before filing the offer with the SEC.
	May 16, 2016	Title III of the JOBS Act becomes effective, permitting investments from unaccredited investors via online crowdfunding portals registered with the SEC.

Figure C1. Example of S-1 filing by an EGC for initial public offering (IPO)

Excerpts below are from the preliminary S-1 filing by Receptos, Inc. (central index key: 0001463729) dated April 4, 2013 for an initial public offering (IPO), and are retrieved from the SEC's EDGAR database.

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The information in this preliminary prospectus is not complete and may be changed. We may not sell these securities until the registration statement filed with the Securities and Exchange Commission is effective. This preliminary prospectus is not an offer to sell these securities and is not soliciting an offer to buy these securities in any jurisdiction where such offer or sale is not permitted.

SUBJECT TO COMPLETION, DATED APRIL 25, 2013

Preliminary Prospectus

4,700,000 Shares

receptos

Common Stock

Receptos, Inc. is offering 4,700,000 shares of common stock. This is the initial public offering of our common stock. Prior to this offering, there has been no public market for our common stock. The initial public offering price of our common stock is expected to be between $14.00 and $16.00 per share.

We have applied to list our common stock on the NASDAQ Global Market under the symbol "RCPT."

The underwriters have an option to purchase a maximum of 705,000 additional shares of common stock from us.

We are an emerging growth company, as defined in section 2(a) of the Securities Act of 1933, as amended, and we have elected to comply with reduced US public company reporting requirements.

Implications of Being an Emerging Growth Company

We qualify as an "emerging growth company" as defined in the Jumpstart Our Business Startups Act of 2012 (JOBS Act). As an emerging growth company, we have taken and intend to continue to take advantage of specified reduced disclosure and other requirements that are otherwise applicable generally to public companies. These provisions include:

- only two years of audited financial statements in addition to any required unaudited interim financial statements with correspondingly reduced "Management's Discussion and Analysis of Financial Condition and Results of Operations" disclosure;

- reduced disclosure about our executive compensation arrangements;

- no non-binding advisory votes on executive compensation or golden parachute arrangements; and

- exemption from the auditor attestation requirement in the assessment of our internal control over financial reporting.

We may continue to take advantage of these exemptions for up to five years or such earlier time that we are no longer an emerging growth company. We would cease to be an emerging growth company on the date that is the earliest of (i) the last day of the fiscal year in which we have total annual gross revenues of $1 billion or more, (ii) December 31, 2018, (iii) the date on which we have issued more than $1 billion in nonconvertible debt during the previous three years, or (iv) the date on which we are deemed to be a large accelerated filer under the rules of the Securities and Exchange Commission. We may choose to take advantage of some but not all of these exemptions. We have taken advantage of reduced reporting requirements in this prospectus. Accordingly, the information contained herein may be different than the information you receive from other public companies in which you hold stock.

We are an "emerging growth company" as defined in the JOBS Act and will be able to avail ourselves of reduced disclosure requirements applicable to emerging growth companies, which could make our common stock less attractive to investors.

We are an "emerging growth company" as defined in the JOBS Act, and we intend to take advantage of certain exemptions from various reporting requirements that are applicable to other public companies that are not "emerging growth companies" including not being required to comply with the auditor attestation requirements of Section 404(b) of the Sarbanes-Oxley Act, reduced disclosure obligations regarding executive compensation in our periodic reports and proxy statements, and exemptions from the requirements of holding a nonbinding advisory vote on executive compensation and shareholder approval of any golden parachute payments not previously approved. We cannot predict if investors will find our common stock less attractive because we may rely on these exemptions. If some investors find our common stock less attractive as a result, there may be a less active trading market for our common stock and our stock price may be more volatile. We may take advantage of these reporting exemptions until we are no longer an "emerging growth company." We will remain an "emerging growth company" until the earliest of (i) the last day of the fiscal year in which we have total annual gross revenues of $1 billion or more, (ii) the last day of our fiscal year following the fifth anniversary of the date of the completion of this offering, (iii) the date on which we have issued more than $1 billion in nonconvertible debt during the previous three years or (iv) the date on which we are deemed to be a large accelerated filer under the rules of the Securities and Exchange Commission.

(nn)   *Emerging Growth Company Status.* From the time of first filing of the Registration Statement with the Commission (or, if earlier, the first date on which the Company engaged directly or through any person authorized to act on its behalf in any communication in reliance on Section 5(d) of the Act) through the date hereof, the Company has been and is an Emerging Growth Company.

(oo)   *Use of Testing-the-Waters Writings.* The Company (a) has not alone engaged in communications with potential investors in reliance on Section 5(d) of the Act other than Testing-the-Waters Communications with entities that are qualified institutional buyers within the meaning of Rule 144A under the Act or institutions that are accredited investors within the meaning of Rule 501 under the Act and (b) has not authorized anyone other than the Underwriters to engage in such communications. The Company reconfirms that the Underwriters have been authorized to act on its behalf in communicating with potential investors in reliance on Section 5(d) of the Act. The Company has not distributed any Testing-the-Waters Writings.

Figure C2. Example of S-1 filing by an EGC for seasoned public offering (SPO)

Excerpts below are from the preliminary S-1 filing by Receptos, Inc. (central index key: 0001463729) dated December 24, 2013 for a seasoned public offering (IPO), and are retrieved from the SEC's EDGAR database.

We are an "emerging growth company" as defined in the JOBS Act and have availed, and intend to continue to avail, ourselves of reduced disclosure requirements applicable to emerging growth companies, which could make our common stock less attractive to investors.

We are an "emerging growth company" as defined in the JOBS Act, and we have taken, and intend to continue to take, advantage of certain exemptions from various reporting requirements that are applicable to other public companies that are not "emerging growth companies" including not being required to comply with the auditor attestation requirements of Section 404(b) of the Sarbanes-Oxley Act, reduced disclosure obligations regarding executive compensation in our periodic reports and proxy statements, and exemptions from the requirements of holding a nonbinding advisory vote on executive compensation and shareholder approval of any golden parachute payments not previously approved. We cannot predict if investors will find our common stock less attractive because we rely on these exemptions. If some investors find our common stock less attractive as a result, there may be a less active trading market for our common stock and our stock price may be more volatile. We may continue taking advantage of these reporting exemptions until we are no longer an "emerging growth company." We will remain an "emerging growth company" until the earliest of (i) the last day of the fiscal year in which we have total annual gross revenues of $1 billion or more, (ii) December 31, 2018, (iii) the date on which we have issued more than $1 billion in nonconvertible debt during the previous three years or (iv) the date on which we are deemed to be a large accelerated filer under the rules of the SEC.

(nn)   *Emerging Growth Company Status.* From the time of first filing of the registration statement with the Commission (or, if earlier, the first date on which the Company engaged directly or through any person authorized to act on its behalf in any Testing-the-Waters Communication) in connection with the Company's initial public offering through the date hereof, the Company has been and is an Emerging Growth Company.

(oo)   *Testing-the-Waters Communications.* The Company has not engaged in any Testing-the-Waters Communications or distributed any Written Testing-the-Waters Communications in connection with the offering of the Offered Securities.

D. Implications of EGC status loss on reporting costs

One of the immediate consequences of losing EGC exemptions (due to LAF regulation) is the rise in disclosure obligations and associated reporting costs. In this section, we attempt to quantify the impact of EGC status loss on reporting costs by comparing the annual audit fees for the sample firms just below and above the $700 million LAF cutoff.

Figure D1 provides a visual illustration of the fuzzy RD design based on equation (2.2). Among firms in the sample, only those that went public as an EGC are likely to be affected by the LAF rule. This allows us to compare the treatment effect β_1 for EGC and NonEGC firms that went public before the JOBS Act. Each plot in Figure D1 relates a firm's annual audit fees to its float in the most recent second fiscal quarter. Local linear regressions are fit on either side of the cutoff. The left-hand plot shows a sharp discontinuous rise in audit fees among ExEGC firms compared to EGCs below the cutoff that remain exempt. The right-hand plot shows no such discontinuity among NonEGC firms.[46]

Table D1 presents the OLS and IV estimates for audit fees around the LAF treatment cutoff. The choice of bandwidth h follows from our main analysis. For robustness, we perform the regressions on three different bandwidths: $250, $300, and $350 million, respectively. The coefficient of *ExEGC* in model (1) is positive and significant at the 1% level, implying that a loss of EGC status leads to an immediate increase in reporting costs. Model (2) includes several controls specified in equation (2.2) which do not affect the statistical significance of the *ExEGC* term. The coefficient of *ExEGC* in model (2) implies an annual increase of $1.194 million in audit fees for the mean EGC firm after it loses its exemptions.

It is possible that EGCs will manipulate their float if they expect to lose exemptions due to the LAF regulation. If this is true, the OLS estimates will underestimate the true effect of EGC status loss because they cannot distinguish between EGCs that did, or did not, avoid compliance with LAF rules. We address these concerns using the IV methodology specified in equations (2.1) and (2.2). The *ExEGC* dummy representing loss of EGC status is instrumented with the *PF700* dummy denoting whether the firm's float six months prior to the most recent second fiscal quarter exceeded $700 million. The first stage regressions based on equation (2.1)

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[46] Figure D2 shows further evidence of an increase in audit fees after an EGC loses its exemptions.

are estimated using a linear probability model. The partial F-statistic has a highly significant value of at least 29.4 (model 4), implying strong instrument choice. The instrumented *ExEGC* has larger coefficients than the OLS estimates, but is weakly significant compared to the OLS estimates. The difference in statistical significance between the OLS and IV estimates shows that while EGCs affected by LAF regulation paid higher audit fees, many of them managed to remain below the cutoff by manipulating their float. Table A2 presents additional empirical evidence that EGCs attempt to evade LAF regulations by manipulating their float through share repurchases.

It is reasonable that EGCs with float closer to the $700 million cutoff are able to evade the LAF rule more easily. Proximity to the cutoff means fewer resources are required to manipulate the float. Consequently, EGCs with a float way above the cutoff will find it more expensive to avoid becoming an LAF. To test this, we use larger bandwidths of $300 and $350 million and recompute the OLS and IV estimates. The results are shown in columns (5)-(12) of Table D1. Coefficients of *ExEGC* in the IV regressions are significant, both in statistical and economic terms. This shows that EGC firms that are farther away from the cutoff face a larger increase in audit fees upon status loss. While some of them may have attempted to lower their float, these efforts may have been insufficient in delaying compliance given these firms' larger distance to the cutoff.

Figure D1. EGC status loss and audit fees

Figures plot annual audit fees over the running variable *float*, which is the total market value of common equity held by public investors on the last day of the preceding second fiscal quarter. Audit fees comprise audit and related fees paid by the company to its auditors for the relevant fiscal year. The sample comprises firms that went public as an "Emerging Growth Company" between April 6, 2012 and April 30, 2019. See Section 3.1 for a description of the sample construction. The left plot compares equity issuance among EGC and ExEGC firms. *EGC* refers to firms that have float below $700 million and thus remain exempt from mandatory disclosure under Title I of the JOBS Act. *ExEGC* refers to firms that have a float above $700 million, and are therefore subject to mandatory disclosure under the "Large Accelerated Filer" (LAF) regulation. The plot on the right shows equity issuance among a placebo sample of *NonEGC* firms that went public before the JOBS Act (January 1, 2000−April 4, 2012) and thus did not quality for EGC treatment during their IPO. Local linear regressions are fit on either side of the LAF cutoff in each plot, as indicated by the blue lines. See Table A1 for a description of these variables.

Figure D2. EGC status loss and audit fees: Density estimation

Figure shows the kernel density estimates of audit fees per year by EGC status. The sample comprises firms that went public as an "Emerging Growth Company" (EGC) between April 6, 2012 and April 30, 2019 and have float between $350 and $1,050 million. See Section 3.1 for a detailed description of the sample construction. Blue bars represent EGC firms that have float below $700 million and thus remain exempt from mandatory disclosure under Title I of the JOBS Act. Red bars represent ExEGC firms that have a float above $700 million and are therefore subject to mandatory disclosure under the "Large Accelerated Filer" (LAF) rules. We apply the Kolmogorov-Smirnov (KS) test and obtain a *D*-statistic of 0.3943, which is statistically significant at the 1% level.

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Table D1. Impact of EGC status loss on audit fees
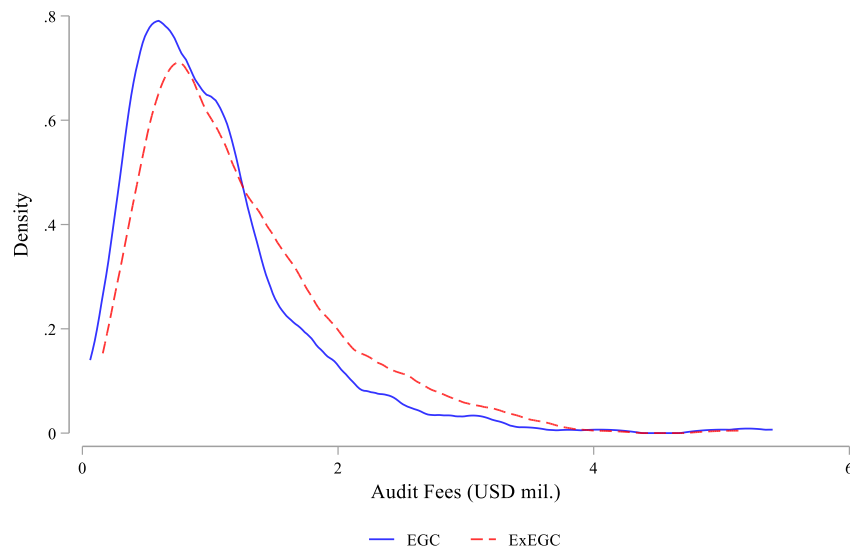
Table presents regression discontinuity (RD) estimates where the dependent variable is the natural logarithm of audit fees. The OLS estimates are based on equation (1); the IV estimates are based on equations (2.1) and (2.2). The sample comprises firms that went public as an "Emerging Growth Company" (EGC) between April 6, 2012 and April 30, 2019. See Section 3.1 for a detailed description of the sample construction. *ExEGC* is a dummy equal to one for firms having a float above $700 million at the end of second fiscal quarter that are subject to mandatory disclosure under the "Large Accelerated Filer" (LAF) regulation, and zero for firms whose float is below the threshold. We use three different bandwidths $h \in$ ($250 million, $300 million, $350million) for the float around the LAF cutoff. For the IV regressions, *ExEGC* is the predicted treatment based on the first-stage model (2.1) using the variable *PF700* as an instrument. *PF700* is equal to one if the firm's float six months prior to the second fiscal quarter exceeds $700 million, and zero otherwise. In all regressions, industry and year fixed effects are included. Standard errors are clustered by firm and are reported in parentheses. ***, **, and * denote significance at the 1%, 5%, and 10% level, respectively. See Table A1 for a detailed description of the variables.

| | h = $250m | | | | h = $300m | | | | h = $350m | | | |
| | OLS | | IV | | OLS | | IV | | OLS | | IV | |
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)
ExEGC	0.173***	0.177***	0.268	0.292*	0.195***	0.176***	0.272**	0.269**	0.230***	0.182***	0.340***	0.268***
	(0.061)	(0.064)	(0.164)	(0.163)	(0.052)	(0.057)	(0.117)	(0.116)	(0.047)	(0.054)	(0.097)	(0.104)
Log (Assets)$_{t-1}$		0.210***		0.205***		0.226***		0.217***		0.235***		0.224***
		(0.058)		(0.054)		(0.059)		(0.056)		(0.057)		(0.055)
Log (Employees)$_{t-1}$		-0.004		-0.005		-0.003		-0.004		-0.004		-0.004
		(0.011)		(0.010)		(0.009)		(0.009)		(0.009)		(0.008)
Debt to Assets$_{t-1}$		0.188		0.201*		0.327**		0.346***		0.221**		0.238**
		(0.118)		(0.114)		(0.128)		(0.123)		(0.107)		(0.104)
Cash to Assets $_{t-1}$		-0.090		-0.096		0.025		0.026		0.034		0.040
		(0.149)		(0.135)		(0.135)		(0.126)		(0.123)		(0.116)
Capex to Assets$_{t-1}$		0.083		0.147		0.309		0.346		0.384		0.441
		(0.680)		(0.607)		(0.595)		(0.544)		(0.519)		(0.479)
R&D to Assets$_{t-1}$		-0.545		-0.552		-0.127		-0.128		-0.280		-0.287
		(0.441)		(0.410)		(0.303)		(0.285)		(0.330)		(0.310)
Log (Age)$_{t-1}$		0.064***		0.068***		0.040*		0.043**		0.029		0.031
		(0.022)		(0.021)		(0.021)		(0.020)		(0.021)		(0.020)
Tobin's Q$_{t-1}$		-0.017		-0.019		-0.012		-0.016		-0.009		-0.014
		(0.022)		(0.020)		(0.020)		(0.019)		(0.018)		(0.018)
Log (Board Size)$_{t-1}$		-0.009		-0.025		-0.065		-0.072		-0.016		-0.022
		(0.078)		(0.074)		(0.072)		(0.069)		(0.061)		(0.059)
Board Independence$_{t-1}$		-0.189		-0.172		-0.077		-0.055		-0.117		-0.101
		(0.216)		(0.193)		(0.205)		(0.190)		(0.174)		(0.163)
Stock Market Return		2.352*		2.143*		0.641		0.560		0.626		0.602
		(1.266)		(1.182)		(1.108)		(1.055)		(0.973)		(0.939)
Hot SPO Market		0.047		0.061		0.059		0.074		0.057		0.067
		(0.124)		(0.119)		(0.107)		(0.105)		(0.093)		(0.090)
Constant	-0.649***	-1.785***	0.073	-1.207***	-0.713***	-1.840***	-0.533***	-2.160***	-0.758***	-1.927***	-0.569***	-2.155***
	(0.208)	(0.578)	(0.150)	(0.443)	(0.169)	(0.545)	(0.159)	(0.482)	(0.141)	(0.532)	(0.149)	(0.463)
Float Terms	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y
Industry/Year FE	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y
Observations	323	276	323	276	431	366	431	366	521	438	521	438
Adjusted R^2	0.228	0.431	0.222	0.422	0.253	0.413	0.249	0.407	0.296	0.439	0.289	0.434
First-stage R^2			0.175	0.185			0.232	0.245			0.268	0.291
First Stage F-stat			35.663	29.395			87.604	66.447			122.496	83.794

E. Implications of EGC status loss on earnings management

In this section, we investigate whether compliance with LAF regulation had a material effect on the quality of earnings reported by EGC firms. In general, the fact that firms' performance is incorporated in the stock price means that they have an incentive to report positive earnings, and exceed the market's expectations from prior periods. Figure E1 presents regression discontinuity (RD) plots of the annual change in earnings per share (EPS) for the firms in our sample. The left-hand plot displays the year-on-year (YoY) change in EPS among EGC and ExEGC firms, and shows a strong discontinuity at the $700 million LAF cutoff. The local linear fit to the left of the cutoff is upward sloping, suggesting that disclosure exemptions give EGCs greater discretion over reported earnings. Such discretion over earnings is not evident among ExEGC firms to the right of the LAF cutoff. The right-hand plot exhibits no such discontinuity in EPS among NonEGC firms that went public before Title I. Figure E2 presents additional evidence that EGC firms report lower earnings upon losing their disclosure exemptions due to the LAF regulation.

Our primary interest is in accruals, which is the *noncash* portion of earnings. Accruals are difficult to track but easier to manipulate to present a heathier image of the firm. Investors are often unaware of this practice and may be adversely affected by the inaccuracy of accruals. Depending on the firm industry, accruals can be decomposed into *regular* and *discretionary accruals*. In particular, discretionary accruals are a proxy for earnings management as they are easily subject to successful managerial manipulation (Teoh, Welch and Wong, 1998).

Following Iliev (2010), we compute discretionary actuals using the Jones (1991) model. First, accruals[47] reported by a firm in a year are regressed against changes in sales, and property, plant, and equipment (PPE) in each two-digit SIC industry in Compustat (excluding the firm itself). Coefficients from this step are used to compute non-discretionary accruals for the firm. Subtracting non-discretionary accruals from reported accruals yields discretionary accruals.

We consider both accruals and discretionary accruals in our analysis. We perform both OLS and IV regressions, but report only the latter to save space.[48] The IV estimates are shown in

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[47] Accruals = Earnings before extraordinary items − Operating cash flow from continuing operations.

[48] The OLS results are available on request. We observe that the IV estimates are smaller in magnitude relative to the OLS estimates. Consistent with our other findings, this leads us to conclude that EGC firms have had some limited success in delaying LAF compliance by manipulating their float.

Table E1. Model (1) includes cash flow from operations and net income change (each scaled by lagged assets), as well as a negative cash flow dummy to account for overall economic activity within the firm. A lagged book-to-market ratio denoting growth opportunities and lagged equity denoting firm size are also included as controls. We also include more observable controls in model (2). A big-four auditor dummy captures variation in practices of the top four and other smaller accounting firms. *Log (Board size)*, *Board Independence*, and *CEO Duality* control for quality of corporate governance.

Models (1)–(2) suggest that a change in EGC status due to mandatory disclosure leads to at least a 4.7% drop in reported accruals, equivalent to $13 million lower earnings for the mean EGC firm. The effect of LAF compliance on EGCs is similar for discretionary accruals, and is statistically significant. The coefficients of *ExEGC* in model (3)–(4) suggest a minimum of 5% reduction in discretionary accruals, implying a $13.8 million drop in earnings for the mean EGC. These lower earnings cannot be attributed only to an increase in audit fees since the effect of LAF compliance on the latter amounts to just $1.19 million per year for the mean EGC firm (see Appendix D).

As a robustness check, we repeat the analysis for wider bandwidths. The results presented in columns (5)-(12) of Table E1 are consistent with our main findings.

Figure E1. EGC status loss and earnings per share

Figures plot year-on-year change in earnings per share (excluding extraordinary items) over the running variable *float*, which is the total market value of common equity held by public investors on the last day of the preceding second fiscal quarter. The sample comprises firms that went public as an "Emerging Growth Company" between April 6, 2012 and April 30, 2019. See Section 3.1 for a description of the sample construction. The left plot compares earnings per share among EGC and ExEGC firms. *EGC* refers to firms that have float below $700 million and thus remain exempt from mandatory disclosure under Title I of the JOBS Act. *ExEGC* refers to firms that have a float above $700 million, and are therefore subject to mandatory disclosure under the "Large Accelerated Filer" (LAF) regulation. The plot on the right displays earnings per share among a placebo sample of *NonEGC* firms that went public before the JOBS Act (January 1, 2000−April 4, 2012) and thus did not quality for EGC treatment during their IPO. Local linear regressions are fit on either side of the LAF cutoff in each plot, as indicated by the blue lines. See Table A1 for a description of these variables.

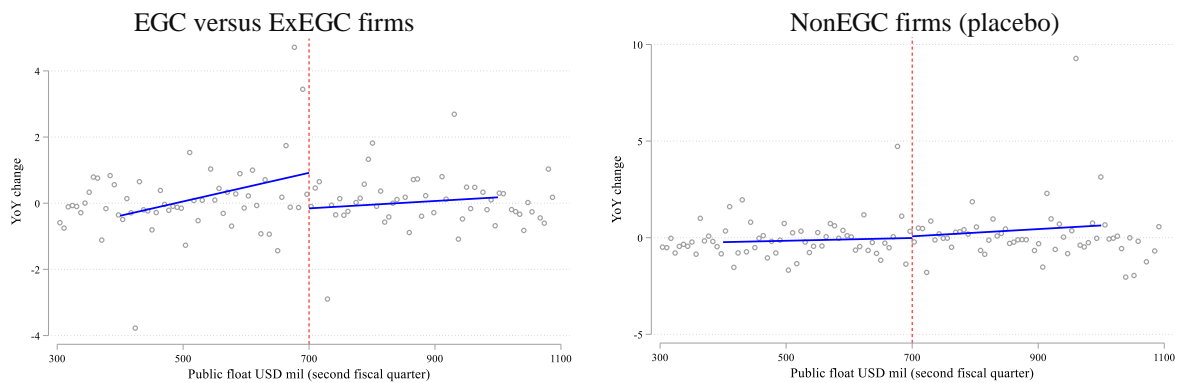EGC versus ExEGC firms   NonEGC firms (placebo)

Figure E2. EGC status loss and earnings per share: Density estimation

Figure shows the kernel density estimates of reported earnings per share (excl. extraordinary items) per year by EGC status. The sample comprises firms that went public as an "Emerging Growth Company" (EGC) between April 6, 2012 and April 30, 2019 and have float between $350 and $1,050 million. See Section 3.1 for a detailed description of the sample construction. Blue bars represent EGC firms that have float below $700 million and thus remain exempt from mandatory disclosure under Title I of the JOBS Act. Red bars represent ExEGC firms that have a float above $700 million and are therefore subject to mandatory disclosure under the "Large Accelerated Filer" (LAF) rules. We apply the Kolmogorov-Smirnov (KS) test and obtain a *D*-statistic of 0.0902 (p-value = 0.151).
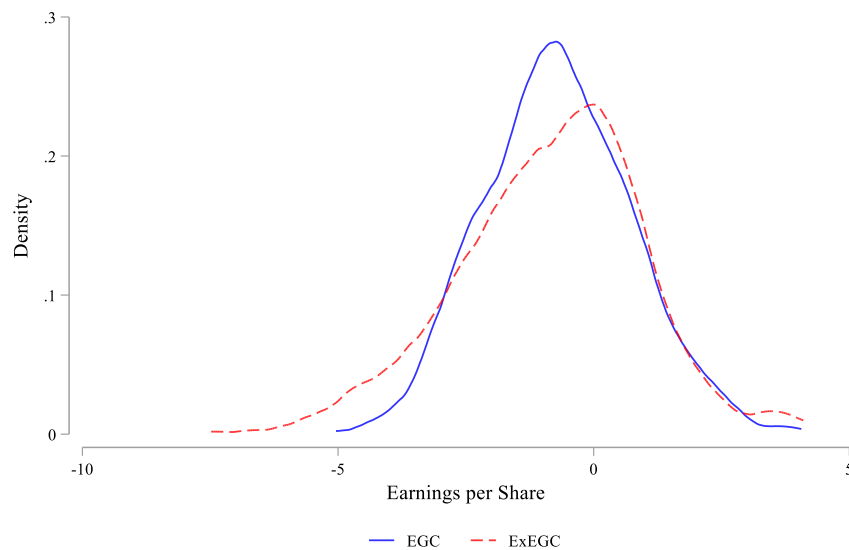

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Table E1. Impact of EGC status loss on earnings reporting quality

Table presents IV regression estimates where the dependent variables are proxies for earnings management, namely *Accruals* and *Discretionary Accruals*. The IV estimates are based on equations (2.1) and (2.2). The sample comprises firms that went public as an "Emerging Growth Company" (EGC) between April 6, 2012 and April 30, 2019. See Section 3.1 for a detailed description of the sample construction. *ExEGC* is a dummy equal to one for firms having a float above $700 million at the end of second fiscal quarter that are subject to mandatory disclosure under the "Large Accelerated Filer" (LAF) regulation, and zero for firms whose float is below the threshold. We use three different bandwidths $h \in$ ($250 million, $300 million, $350million) for the float around the LAF cutoff. For the IV regressions, *ExEGC* is the predicted treatment based on the first-stage model (2.1) using the variable *PF700* as an instrument. *PF700* is equal to one if the firm's float six months prior to the second fiscal quarter exceeds $700 million, and zero otherwise. In all regressions, industry and year fixed effects are included. Standard errors are clustered by firm and are reported in parentheses. ***, **, and * denote significance at the 1%, 5%, and 10% level, respectively. See Table A1 for a detailed description of the variables.

	$h = \$250m$				$h = \$300m$				$h = \$350m$			
	Accruals		Discretionary Accruals		Accruals		Discretionary Accruals		Accruals		Discretionary Accruals	
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)
ExEGC	-0.057	-0.047	-0.055***	-0.050**	-0.040*	-0.032	-0.030**	-0.026*	-0.051**	-0.049**	-0.043***	-0.044**
	(0.036)	(0.038)	(0.016)	(0.018)	(0.017)	(0.018)	(0.010)	(0.013)	(0.019)	(0.019)	(0.011)	(0.014)
Log (Assets)$_{t-1}$	0.044***	0.049**	0.040***	0.046***	0.052***	0.051***	0.044***	0.048***	0.050***	0.046**	0.041***	0.042***
	(0.012)	(0.016)	(0.008)	(0.013)	(0.013)	(0.014)	(0.007)	(0.010)	(0.013)	(0.014)	(0.006)	(0.009)
Cash flow from operations												
$\frac{}{Assets_{t-1}}$	-0.002	-0.003	-0.000	-0.001	-0.002	-0.002	0.001	-0.000	-0.001	-0.001	0.002	0.001
	(0.002)	(0.002)	(0.002)	(0.001)	(0.002)	(0.001)	(0.001)	(0.001)	(0.002)	(0.002)	(0.002)	(0.001)
Change in net income												
$\frac{}{Assets_{t-1}}$	0.164**	0.155**	0.163**	0.156**	0.141***	0.136***	0.139***	0.137***	0.143***	0.142***	0.147***	0.146***
	(0.057)	(0.057)	(0.055)	(0.054)	(0.032)	(0.032)	(0.036)	(0.035)	(0.036)	(0.036)	(0.040)	(0.038)
Negative CFO$_{t-1}$	-0.028	-0.029	-0.032**	-0.025*	-0.040*	-0.040*	-0.030***	-0.021***	-0.037**	-0.040**	-0.026**	-0.021**
	(0.024)	(0.024)	(0.010)	(0.011)	(0.019)	(0.019)	(0.008)	(0.006)	(0.014)	(0.015)	(0.008)	(0.007)
Book to Market value$_{t-1}$	-0.080*	-0.083*	-0.043	-0.051	-0.074*	-0.068*	-0.036	-0.038	-0.075**	-0.066*	-0.030	-0.031
	(0.037)	(0.038)	(0.026)	(0.030)	(0.033)	(0.034)	(0.028)	(0.031)	(0.025)	(0.026)	(0.017)	(0.021)
Log (Equity)$_{t-1}$	0.000	0.000	0.002	0.002	-0.001	-0.001	0.001	0.001	-0.003	-0.003	-0.001	-0.002
	(0.002)	(0.002)	(0.002)	(0.002)	(0.002)	(0.002)	(0.002)	(0.003)	(0.002)	(0.003)	(0.003)	(0.003)
Big4 Auditor		-0.042		-0.041		-0.029		-0.037		-0.004		-0.014
		(0.024)		(0.036)		(0.018)		(0.024)		(0.026)		(0.032)
Log (Board Size)		-0.000		-0.001		-0.004		0.004		-0.003		0.000
		(0.026)		(0.018)		(0.016)		(0.016)		(0.017)		(0.016)
Dual CEO		-0.035		-0.037		-0.020		-0.030*		-0.013		-0.023*
		(0.020)		(0.027)		(0.011)		(0.012)		(0.009)		(0.009)
Board Independence		-0.019		-0.050		-0.009		-0.056		-0.021		-0.044
		(0.071)		(0.048)		(0.050)		(0.037)		(0.061)		(0.043)
Constant	-0.313***	-0.385***	-0.209***	-0.197*	-0.320***	-0.366***	-0.243***	-0.231***	-0.287***	-0.315***	-0.203***	-0.155***
	(0.084)	(0.094)	(0.040)	(0.077)	(0.075)	(0.074)	(0.028)	(0.058)	(0.075)	(0.076)	(0.023)	(0.040)
Industry FE	Y	Y	N	N	Y	Y	N	N	Y	Y	N	N
Time FE	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y
Observations	265	253	265	253	355	336	355	336	424	399	424	399
Adjusted R^2	0.083	0.075	0.075	0.070	0.167	0.162	0.116	0.109	0.200	0.192	0.101	0.089
First-stage R^2	0.183	0.173	0.169	0.157	0.246	0.229	0.241	0.224	0.289	0.274	0.283	0.264
First Stage F-stat	68.360	123.137	122.338	235.876	123.734	135.848	162.992	149.376	226.116	208.883	267.707	243.872