INFORMATION MANAGEMENT AND THE GUN-JUMPING RULES

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ABSTRACT: I examine a Securities and Exchange Commission reform which substantially relaxed the pre-issuance "quiet period" restrictions for certain large well established issuers. I develop a measure of the penetration of firm-issued news (*NewsRatio*), and, using a triple-interaction framework, find that this measure is more negatively associated with abnormal returns after seasoned equity offerings ("SEOs") by certain affected firms after the reform. The evidence is most consistent with active timing, in which firms actively manage the information environment in the pre-issuance period. My findings cast doubt on the idea that large, well established firms cannot successfully "condition the market."

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Working under the theory that "sunlight is the best disinfectant," much of the American securities regulatory regime is designed to increase disclosure. A notable exception to this is the securities registration process. Governed by the 1933 Securities Act and its associated rules, the pre-issuance period is characterized by strict limitations on the nature and content of public communications by the issuer and others involved in the issuance. The standard justification for these restrictions is a concern that without them, issuers will seek to "condition the market" by releasing information intended to boost the price of the issuing company's stock, allowing it to sell the securities at an inflated price.

The SEC's 2005 Securities Offering Reforms ("SOR") substantially relaxed some of these communications restrictions. The primary beneficiaries of the SOR were firms designated "Well Known Seasoned Issuers" ("WKSIs"). On the theory that an established public company with a substantial pre-existing public float would not be able to effectively condition the market for its securities in the run-up to an issuance, the SEC determined that the costs of restricting these communications outweighed the potential for investor abuse from permitting them. This is consistent with the idea that the market is best able to evaluate large public companies, which are generally followed by analysis and are subject to scrutiny by sophisticated institutional investors. Notwithstanding this, I find evidence that WKSIs were able to take advantage of the SOR to issue securities in a favorable information environment.

There are two ways in which a manager could seek to manage the information environment in the period leading up to an issuance. First, the manager could wait for a positive news environment to arrive, and then time an issuance to take advantage of this environment. Alternatively, she could target a particular issuance date, and then seek to manage

the information environment around that date. The difference comes down to which is viewed as fixed: the arrival of information or the issuance date. In reality, of course, a manager may employ a combination of both of these informational timing strategies. The 2005 SOR increased the scope for both types of informational timing.

I examine the relationship between news and abnormal returns around SEOs before and after the SOR. The fact that the SOR primarily affected WKSIs allows me to disentangle time and treatment effects in my analysis. This, in turn, allows me to interpret my findings as causal effects of the SOR. The reform, described in more detail in Part 1, substantially relaxed the pre-issuance "quiet period" restrictions on certain large, well established issuers. At the same time, it also liberalized the so-called "shelf registration" rules for the same set of issuers, granting them substantial flexibility in the timing of their issuances. As a result, the SOR facilitated both active and passive timing strategies.

My main results are as follows. First, I develop a measure called *NewsRatio*, defined as $\frac{1+NewStories}{1+PressReleases}$. I interpret this measure as capturing the extent to which firm-originated news is disseminated into the market. In my main specification, I investigate the relationship between *NewsRatio* and abnormal returns. I use a triple-interaction methodology and find that such news in the pre-issuance period is more negatively associated with cumulative abnormal returns in the post issuance period for WKSI issuances that are unlikely to be shelf takedowns. I find no relationship between this measure and cumulative abnormal for issuances that are more likely to be shelf takedowns. While I cannot rule out the possibility that issuers are simply timing issuances to take advantage of the information environment, these results are most consistent with an active information management interpretation.

These results suggest that, even in the case of a large well known issuer, managers may be able to systematically issue securities at times when the information environment is particularly favorable for doing so. Further analyses suggest that my results among non-shelf issuances are driven by a wedge between WKSIs and non-WKSIs: after the SOR, pre-issuance *NewsRatio* becomes more *positively* associated with post-issuance returns for non-WKSIs (i.e., *untreated* firms), and more *negatively* associated post-issuance returns for WKSIs (i.e., *treated* firms). This is consistent with market participants imperfectly adjusting to the new informational environment. This, in turn, suggests that the relaxation of regulatory constraints during the pre-offering period was not costless to market participants. Importantly, nothing in my analysis indicates that firms are violating the securities laws.

This paper contributes to several literatures. A fundamental question in corporate finance is how firms raise capital, and more specifically, when and how firms decide to sell equity. Summarizing the state of the literature, Baker and Wurgler conclude that "[v]iewed as a whole, the evidence indicates that market timing and attempted market timing play a considerable role in equity issuance decisions" (Baker and Wurgler, 2013, p. 373). In other words, managers seek to sell equity when that equity is relatively overvalued. For example, there is substantial evidence that managers time aggregate market conditions: in their seminal article, Baker and Wurgler (2000) look at the relationship between aggregate stock returns and aggregate debt and equity issuances, and find that just before periods of low market returns, firms issue relatively more equity than debt. Other scholars have found evidence that managers are able to successfully exploit the firm-specific information environment. DellaVigna and Pollet (2013) find evidence that

the market does not correctly anticipate long run (5-10 years in the future) demographic shifts, and that managers respond to this shortsightedness by engaging in market timing. Even more closely related to this paper, Ahern and Sosyura (2014) find evidence that managers manipulate the information environmental around mergers: bidders in stock mergers originate more news stories – generating a short term increase in their stock prices – during the period when the stock exchange ratio is determined, substantially impacting the takeover price. They refer to this phenomenon as "active media management." This article contributes to this literature by finding evidence of a similar phenomenon in the SEO context.

This article also contributes to the literature on the gun-jumping rules in general, and the SOR in particular. Prior work on this topic has come to starkly divergent conclusions. As part of his detailed legal analysis of the SOR, Morrissey (2006) argued that the reforms would leave investors "more vulnerable to the manipulations of corporate wrongdoers," and that they do not represent the best interest of investors.[1] Notwithstanding this, the two existing empirical studies of the effect of the SOR concluded that it had, if anything, a beneficial impact on the SEO market. The first, by Shroff, Sun, White, and Zhang (2013), finds evidence that while WKSIs took advantage of the SOR to increase their pre-issuance disclosures, they "find no evidence of an association between pre-SEO good news disclosures and post-SEO abnormal returns" (Shroff, Sun, White, and Zhang, 2013, 1302). Using a slightly different approach, Clinton, White, and Woidtke (2014) come to similar conclusions: they too find evidence that WKSIs increased their pre-issuance disclosures after the

[1]This argument presumes that a major purpose of the securities regulatory regime is to protect investors. Mahoney (2001) has put forth a different explanation, arguing that the Securities Act is best understood as a means of restricting competition among investment banks for the benefit of certain entrenched participants in the securities market. While I take the SEC's stated objective of investor protection at face value for the purposes of this analysis, this does not reflect a position one way or the other on this broader debate.

SOR, but find no evidence that good news disclosures during the pre-issuance period are accompanied by a reversal. Rather, they interpret their abnormal return regressions as being "consistent with greater capital formation benefits through more informative disclosure and a richer information environment" (Clinton, White, and Woidtke, 2014, 75).

Conceptually, the biggest difference between the analysis in this article and these prior articles is the conception of the information environment. Both prior papers focused on information disseminated by the firm (management forecasts and firm press releases in the case of Shroff, Sun, White, and Zhang (2013), and management earnings forecasts, 8-Ks, free writing prospectuses, and earnings announcements in the case of Clinton, White, and Woidtke (2014)). As discussed in more detail in Part 4.2, using a measure of firm-issued news – press releases, constructed using data from RavenPack – I find results that are broadly consistent with their null results. It is only when I use my *NewsRatio* measure that I find evidence of information management.[2]

While this article focuses on informational timing in the SEO context, the question of whether managers can successfully time the information environment is much more broadly applicable. There are several reasons why this setting is particularly well suited to study this broader question. First, there is a rich literature, harkening back to Jensen and Meckling (1976) and Myers and Majluf (1984), on the agency problems associated with equity issuance. If managers are able to time the information environment around SORs to their advantage, it stands to reason that they may also be able to do so elsewhere, where the risk of agency problems may be less salient. Moreover, the fact that this reform

[2]In addition to this central conceptual difference, there are the usual differences in empirical techniques and judgments in constructing our samples and implementing our empirical analyses.

only affected large, well established firms is material in interpreting these results. On average, these are the firms about which there is already the largest amount of information in the market, and to which market participants tend to pay the most attention. To the extent that managers of smaller firms, which are likely to be subject to less scrutiny on average, are more able to engage in this type of timing, my estimates will understate the ability of managers of the average firm to engage in such timing.

The remainder of this article proceeds as follows. In Part 1, I discuss the securities registration process and the SOR. In Part 2, I present the data and sample construction for my empirical analysis. I present my empirical analysis in Part 3 and discuss a series of robustness and additional analyses in Part 4. Part 5 concludes.

1. The Securities Registration Process and the SOR

I begin with a brief overview of the regulatory requirements during the securities issuance process, including the 2005 SOR. In order for a security to be offered and sold to the public, the issuer must either register the security in accordance with the Securities Act of 1933 (the "Securities Act") or it must find some exemption from the registration requirement. In registering, the company is required to file the appropriate registration statement with the SEC. A significant part of the registration statement is the statutory prospectus.

The Securities Act imposes strict communication restrictions during the registration and offering process. Violations of these provisions are typically referred to as "gun jumping," and the restrictions themselves as the "gun-jumping rules." (Choi and Pritchard, 2012, 402-451). As Choi and Prichard explain in a leading securities regulation casebook, the "gun-jumping rules have three broad goals," (i) the regulation of the registration

statement and the statutory prospectus, (ii) the distribution of the statutory prospectus to investors during and shortly after the offering, and (iii) the restriction of "information about the offering if it is not part of the registration statement or prospectus." (Choi and Pritchard, 2012, p. 404-5). This article focuses on the third of these goals.

The gun-jumping rules divide the time around an issuance into three periods. The period leading up to the filing of the registration statement is commonly known as the "pre-filing period." The period between the filing date and the date on which the registration statement becomes effective is known as the "waiting period." Once the registration statement becomes effective (in general, 20 days after it is filed), the issuance enters the "post-effective period." The length of the post-effective period varies by issuer, but for large, publicly traded firms it ends 25 days after the effective date. Roughly speaking, the restrictions on information are strictest during the pre-filing period, and become progressively more relaxed as one moves through the waiting period and into the post effective period. Figure 1 summarizes this timeline.[3] For the purposes of this analysis, I will focus on the pre-filing period and the waiting period, and refer to the union of the these periods as the "quiet period."

A second way that a firm can sell securities is using a "shelf registration" (sometimes called a "shelf offering"). Under certain circumstances, shelf registration allows eligible issuers to issue securities much faster than they would under the standard process. In order to conduct a shelf offering, the issuer first files a base prospectus with the SEC, which sits "on the shelf". When the issuer wishes to engage in an offering, it supplements this base prospectus with a prospectus supplement. This is known as a "shelf take-down."

[3]For a summary of the rules before and after the SOR, see Table 1.

1.1. *The Gun-Jumping Rules Prior to the 2005 Reforms*

During the pre-filing period, §§5(a) & (c) of the Securities Act prohibit both "sales" of, and "offers to sell," securities. Because of the way these terms are defined, these provisions have the effect of restricting virtually all communications between the issuer (and others involved in the issuance) and the market. As explained by Choi and Prichard, "[i]n the SEC's view 'offer' encompasses all communications that may 'condition' the market for the securities" (Choi and Pritchard, 2012, p. 410-1).

Prior to the SOR, apart from narrow carve-outs for negotiations or agreements between an issuer and its underwriters, communications – both oral and written – "between anyone involved in an upcoming offering of securities and potential investors were essentially forbidden" (Morrissey, 2006, p. 568). Soft, unverifiable "forward looking information" was discouraged, and even mentioning the upcoming issuance in a way that was not carefully orchestrated could endanger the offering. Later SEC releases contained carve-outs for "factual information that did not include predictions or opinions," and enumerated "a list of permitted topics that a business might discuss freely without fear that such communications would be deemed a selling effort," such as normal advertising, periodic reporting, and other typical business communications (Morrissey, 2006, p. 570).

Once the issuer has filed the registration statement, it enters the waiting period. Section 5(c) of the Securities Act continues to prohibit the "sale" of securities during this time. While §5(a) no longer applies, §5(b)(1) effectively restricts written and broadcast communications to the preliminary prospectus filed with the SEC, while placing no restrictions on oral, non-broadcast communications (Choi and Pritchard, 2012, 432). This

exception permits so-called "road shows." Once the prospectus has become effective, sales can begin and most of the communications restrictions are lifted.[4]

1.2. *The 2005 Securities Offering Reforms*

The SOR relaxed the gun-jumping rules for large established issuers, while maintaining them for smaller, less established ones.[5] More specifically, the 2005 reforms created four categories of issuer: (i) Well Known Seasoned Issuers ("WKSIs"), (ii) Seasoned Issuers, (iii) Unseasoned Reporting Issuers, and (iv) Non-reporting Issuers. WKSI represent the largest, most established issuers. To qualify as a WKSI, an issuer must have either a worldwide market value of outstanding common equity, held by non-affiliates, of $700 million or have issued in the last 3 years at least $1 billion in aggregate principal amount of registered non-convertible securities, other than common equity, in primary offers for cash (i.e., not exchanges). In addition, WKSIs must file reports under §§13(a) or 15(d) of the Securities Exchange Act of 1934 (the "Exchange Act"), and be current in such reports.[6] For the purposes of this analysis, I will generally restrict attention to the WKSI/non-WKSI distinction.

The second category is Seasoned Issuers, which includes issuers that are eligible to use certain abbreviated registration forms. Unseasoned Reporting Issuers include all issuers that are required to file reports pursuant to Section 13 or Section 15(d) of the Exchange Act but do not satisfy the requirements to use these abbreviated forms. Issuers that are

[4]While §§5(a) & (c) no longer apply in the post-effective period, §§5(b)(1) & (2) continue to impose certain restrictions. Most notably, the securities regulations require that any securities transmitted pursuant to such sales be accompanied by the prospectus.

[5]The 2012 Jumpstart Our Business Startups Act ("JOBS Act") further relaxed some of the rules for some of the smallest, least established companies. Because my sample period ends in 2008, my discussion refers to the regulatory regime prior to the implementation of the JOBS Act.

[6]Under certain conditions, a majority owned subsidiary of a WKSI can itself qualify as a WKSI. For details, see 17 C.F.R. 230.405.

not required to file reports pursuant to Section 13 or Section 15(d) of the Exchange Act (regardless of whether they are filing such reports voluntarily) constitute Non-reporting Issuers.

The SOR substantially relaxed the gun jumping rules' communications restrictions for WKSIs. According to the SEC's release containing the final rule, under the new rules, WKSIs "have freedom generally from the gun-jumping provisions to communicate at any time"(Securities and Exchange Commission, 2005, 50-1). During the pre-filing period, the new Rule 163 "exempts both oral and written communications, including offers, by or on behalf of WKSIs" (Choi and Pritchard, 2012, 418). Among other things, the reforms also permit all reporting issuers to continue to release "factual business information" and "forward-looking information" (17 C.F.R. 230.168), and allow any issuer to continue making regular disclosures of factual business information (17 C.F.R. 230.169). The SOR also resolved an ambiguity relating to the beginning of the pre-filing period. In a 1969 SEC Release, this SEC had interpreted this period as beginning "at least from the time an issuer reaches an understanding with the . . . managing underwriter" (Securities and Exchange Commission, 1969). This ambiguity may have chilled firm communications even well before the issuance. The 2005 SOR replaced with with a bright line rule which defined the pre-filing period as beginning 30 days before the filing (Securities Act Rule 163A).

The reforms also dramatically relaxed the gun-jumping rules for WKSIs during the waiting period. In particular, they introduced a new concept – the "free writing prospectus" (FWP) – "a written communication that constitutes an offer to sell or a solicitation of an offer to buy securities" other than the prospectus filed with the SEC (Securities and Exchange Commission, 2005, 92). While the issuer is required, under certain circumstances,

to file the FWP with the SEC, according to one securities law scholar, "[t]hese filing conditions do not seem to limit the ability for any offering participant to communicate freely with the public concerning an upcoming offering." (Morrissey, 2006, p. 587). While there are certain exceptions to this "free communication," it is clear that, under the new rules imposed under the SOR, WKSIs are subject to far fewer restrictions than any of the the other categories of issuers. The reforms also relaxed some of the restrictions regarding roadshows (Securities Act Rule 433). Finally, in the post-effective period, the most significant aspect of the 2005 reform was that it relaxed the prospectus delivery requirement and moved instead toward an "access equals delivery" regime. Here again, the new rules are even more permissive for WKSIs and seasoned issuers (Choi and Pritchard, 2012, p. 445-7).

1.3. *Shelf-Registration Before and After the SOR*

Even before the 2005 Reforms, the SEC allowed certain issuances to be conducted using a "shelf registration" process. Under this process, issuers could register a base prospectus in advance, and then do a "shelf take down" over the next two years. Governed by Rule 415, this operates as a form of limited pre-registration for securities that would be offered on a delayed or continuous basis, subject to certain requirements. The base prospectus, filed with the SEC, "needed to specify basic information about the issuer and also needed to specify the type and value of the securities to be sold in the period covered by the shelf registration." (Morrissey, 2006, p. 591).

The SOR substantially relaxed these rules, particularly for WKSIs. The waiting period relating to the base prospectus was eliminated, and the shelf period was extended to three years. Firms no longer need to specify the value of the securities they intend to issue in the

base prospectus, and the amount of information required was reduced.[7] Finally, the filing fees changed to a "pay as you go" model, reducing the upfront cost of shelf registrations for this firms.

In the remainder of this article, I study the effect, if any, of the SOR's changes to the pre-issuance information environment on post-issuance abnormal returns. To the extent that the pre-issuance environment has a differential impact on post-issuance abnormal returns for WKSIs after the SOR, I interpret this as evidence that the relaxation of the gun-jumping rules in the SOR allowed firms to better manage the pre-issuance information environment. Because the SOR relaxed both the quiet period information restrictions and the rules for conducting shelf takedowns, I analyze these two types of issuances separately. In Part 4.3, I investigate whether there is any evidence of an overall change in the relationship between shelf offerings (versus non-shelf issuances) and post-issuance abnormal returns for WKSIs after the SOR.

2. Data and Sample Construction

I begin by obtaining issuance data on Seasoned Equity Offerings (SEOs) from the Thompson Reuters SDC Platinum database. I retain seasoned issuances of common shares to the US public marketplace between 2003 and 2008. I then exclude all issuances for which the issuance or filing date is missing, or for which the filing gap – the number of days between the filing date and the issuance, as reported in SDC Platinum – exceeds the maximum allowable gap under the existing shelf registration regulations.[8]

[7] This information must be included later in the prospectus supplement.

[8] In a relatively small number of cases, SDC Platinum indicates that the gap between filing and issuance is longer than the maximum allowable period for shelf issuances, and I exclude these issuances. Specifically, I exclude issuances for which the gap between the filing date and the issuance date is more than 2 years (730 days) if the filing preceded the SOR, and more than 3 years (1,095 days) if the filing occurred after

Unlike prior studies, I do not exclude issuances that appear to be shelf take-downs, since the liberalization of the shelf registration requirements was an important part of the SOR.[9] However, recognizing that shelf take-downs might differ from other issuances in important ways, I divide my sample into two groups. Because my data do not permit me to identify shelf registrations directly, I use the filing gap as a proxy. I refer to issuances with a filing gap of no more than 120 days (four months) as the "non-shelf" sample, and those with a filing gap of more than 120 days as the "shelf" registrations.[10]

I merge this sample with the Center for Research in Security Prices (CRSP) daily stock price files to obtain stock return data, and with the CRSP/Compustat Merged Database Security Monthly file to obtain firm CIK numbers. I then merge this with RavenPack News Analytics data on news stories and press releases. RavenPack records and analyzes news stories on over 40,000 companies, and therefore allows for a different perspective on a firm's news environment compared to focusing just on firm issued news. Each time a news story mentions a firm, RavenPack uses a proprietary algorithm to generate a "relevance score" between 0 and 100 for each firm$\times$story. This allows me to separate news stories that merely mention a firm from those that are really "about" that firm. According to RavenPack's User Guide, a relevance score of 90 or higher for a particular firm$\times$story generally indicates that the firm is mentioned or referenced in headline or main title of the story (RavenPack, 2015). I therefore restrict attention to stories with a relevance score of 90 or higher.

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the reform. I recognize that this raises some questions about the reliability of the filing date data, which I address in my construction of the pre-issuance quiet period.

[9]For example, Shroff, Sun, White, and Zhang (2013) exclude issuances for which the gap between the filing date and the issuance date of more than 90 days. I confirm that my analysis is robust to this alternative cutoff in Part 4.1.

[10]This 120 day cutoff is somewhat arbitrary. In the case of a non-shelf issuance, I believe that 4 months is a very generous amount of time for an issuance to take place after the filing. 120 days is also close to the mean filing gap for non-WKSI issuers in the period before the SOR (126.6 days).

Finally, I scrape the market value of equity held by non-affiliates from the 10-Ks filed with the SEC on Edgar and match these to my sample firms by CIK number. While the market value of equity is easily computed using CRSP data, CRSP does not contain information about the market value of shares held by affiliates. Obtaining these values directly from the firms' 10-Ks therefore allows me to more precisely match the regulatory threshold than would be possible using data from CRSP. I drop firms for which I do not have at least 85 observations in my estimation window for constructing abnormal returns and obtain daily pricing factors from Kenneth French's website. After merging, I am left with a total of 1,408 issuances by 891 firms. 865 of these issuances (representing 701 firms) are in my non-shelf sample, and the remaining 543 (356 firms) are in my shelf sample. 166 firms had both both shelf and non-shelf issuances in my sample period.

To study the information environment in the period leading up to an issuance, I construct two different proxies for the quiet period. The "synthetic" quiet period is the 50 day period immediately preceding the issuance. I choose 50 days to match the fact that, as discussed in Part 1, the waiting period is generally 20 days, and the pre-filing period, while not precisely defined prior to the SOR, is now defined to be 30 days.

I also construct a "statutory" quiet period. This is the 30 day period leading up to the filing date as well as the 20 day period immediately following the filing date. In the event that the issuance occurs less than 20 days after the filing date, the waiting period is truncated at the day immediately prior to the issuance.[11] There are drawbacks to both of these quiet period measures. Because it is constructed using the issuance date rather than the filing date, the synthetic quiet period will be a noisy proxy for the period during which

[11] In one instance, the filing date recorded on SDC Platinum is the day after the issuance date. For that issuance, I set the statutory waiting period to zero days.

the firm is in fact subject to the gun-jumping rules. On the other hand, because it is, by construction, the period immediately before the issuance, the synthetic quiet period does a better job of capturing the information environment immediately before the issuance. Moreover, the possibility of measurement error in the filing dates means that the statutory quiet period measure may actually be be noisier than the synthetic quiet period.

Perhaps more importantly for the purposes of this analysis, the statutory quiet period does a poor job of capturing the true pre-issuance information environment for shelf-issuances, since, by assumption, the issuance date is well after the filing date for the shelf sample. In contrast, the synthetic quiet period is, by construction, the period immediately preceding the issuance. Not only is this more likely to capture the relevant environment, to the extent that the SOR make it easier for some firms to move quickly to take advantage of favorable information environments by doing a shelf issuance, the most relevant period is the period immediately preceding the issuance. While on balance these features lead me to prefer the synthetic quiet period for my main analysis, I repeat the analysis from Part 3.2 in Part 4.1 using the statutory quiet period and find similar results.

3. Empirical Analysis

3.1. *NewsRatio Measure*

I begin my empirical analysis by constructing a variable called $NewsRatio_{i,t}$, which I define as $\frac{1+NewStories_{i,t}}{1+PressReleases_{i,t}}$.[12] $NewStories_{i,t}$ ($PressReleases_{i,t}$) represents the total number of full news stories about firm i (press releases issued by firm i) with a relevance score of at least 90 on a given day t. This measure captures the penetration of firm issued news,

[12] I use $1 + PressReleases_{i,t}$ in the denominator to ensure that the variable is defined even when the number of press releases is zero. I then use $1 + NewStories_{i,t}$ in the numerator so that the ratio remains sensible for small values of $PressReleases_{i,t}$ and $NewsStories_{i,t}$.

or the extent to which, on average, each press release issued by the firm is disseminated in the market. A *NewsRatio* of 1 means that, on average, each press release is associated with one news story. The higher the *NewsRatio*, the greater the extent to which firm issued news is picked up and disseminated by the press.

I believe that my *NewsRatio* variable is an appropriate measure to use in analyzing the effect of the SOR for several reasons. First, because it measures the relationship between press releases and news stories, it provides a more nuanced measure of the actual information environment than press releases alone. Moreover, while market participants may be able to appropriately discount the information they receive from press releases, discounting the information that is filtered through news stories requires an additional, and much more complex, cognitive step. This is consistent with the "persuasion bias" theory proposed by DeMarzo, Vayanos, and Zwiebel (2003), in which computational burdens prevent individuals from properly adjusting for repetitions of information. Finally, while a manager might conceivably try to gin up news coverage directly, the mechanism at work in managing the *NewsRatio* is much more direct and transparent. For example, a manager (or, more likely, a firm's public relations team) might reach out to contacts in the financial press and encourage them write stories about a particular press release. As such, an alternative interpretation of *NewsRatio* is as an average measure of the effectiveness of such firm effort. Given that the SOR relaxed the communications restrictions on WKSIs, it is natural for the news measure of interest to be something that is tied to communications that come from WKSIs.

3.2. *The Effect of News in the Quiet Period after the SOR*

I now turn to my main analysis, where I investigate the relationship between my *NewsRatio* measure in the pre-issuance period and buy-and hold cumulative abnormal returns in the post issuance period. To do so, I employ a triple-interaction framework, which allows me to study whether the relationship between my *NewsRatio* measure in the pre-issuance period and abnormal returns in the post-issuance period changed differentially for WKSIs (relative to non-WKSIs) after the SOR.

I begin by dividing my sample into two groups: shelf issuances and non-shelf issuances.[13] As discussed in Parts 1 and 2, there are good reasons to think that shelf and non-shelf registrations differ in important ways. Shelf issuances, by their very nature, are issuances that can be conducted quickly. As a result, these types of issuances are most consistent with passive information management: once a manager has filed a base prospectus, she has the flexibility to wait for a favorable news environment before beginning the issuance.

The non-shelf issuances, on the other hand, are more directly affected by the quiet period restrictions. In these issuances, the manager intends to issue relatively soon after filing. Non-shelf registrations are therefore the most promising candidates to investigate active information management, in which the issuance date is held relatively fixed and the manager attempts to time the flow of information to the market around that date. As discussed above, this information management may be entirely permissible under the securities regulatory regime.

[13] As discussed in Part 2, because I do not directly observe whether or not an issuance is a true shelf issuance, I use the amount time between filing and issuance as a proxy for whether or not an issuance is a shelf registration. To the extent that there is noise in my proxy, this should make it more difficult for me to find statistically significant results.

Next, I construct a version of my $NewsRatio_{i,t}$ measure that corresponds to the quiet period preceding each issuance. To do so, I begin by computing the average number of news stories about (press releases by) firm i per day during the quiet period before issuance j, and refer to each of these variables as $\overline{News}_{i,j}$ and $\overline{Releases}_{i,j}$, respectively. I then define $\overline{NewsRatio}_{i,j} = \frac{(1+\overline{News}_{i,j})}{(1+\overline{Releases}_{i,j})}$, which is the analogue to my daily $NewsRatio_{i,t}$ measure at the issuance level.

Finally, I construct abnormal buy-and-hold returns.[14] I use a standard 3-factor model in my baseline analysis, and repeat the analysis using one and four factor models in Part 4.1 for robustness. Using these abnormal returns, I estimate the following regression separately for the shelf and non-shelf samples:

$$\begin{aligned} AR_{i,j,H} = \alpha + \beta_1 \times \overline{NewsRatio}_{i,j} \times WKSI_{i,j} \times After_j + \beta_2 \times \overline{NewsRatio}_{i,j} \times WKSI_{i,j} \\ + \beta_3 \times \overline{NewsRatio}_{i,j} \times After_j + \beta_4 \times WKSI_{i,j} \times After_j \\ + \beta_5 \times \overline{NewsRatio}_{i,j} + \beta_6 \times WKSI_{i,j} + \beta_7 \times After_j + \varepsilon \quad (1) \end{aligned}$$

where $AR_{i,j,H}$ is the buy-and-hold abnormal return of firm i doing issuance j for horizon H where $H \in \{-30, -10, 1, 5, 10, 20, 30, 40, 50\}$. $\overline{NewsRatio}_{i,j}$ represent the news ratio relating to firm i in the quiet period before issuance j, as discussed above, $WKSI_{i,j}$ is a dummy variable equal to one if firm i was a WKSI at the time of issuance j, and $After_j$ is a dummy variable equal to one if issuance j occurred after the SOR. Standard errors are clustered by issue date. Tables 2 and 3 present the results for the non-shelf and shelf samples, respectively, using the synthetic quiet period. For ease of interpretation, I plot the

[14] See Appendix A for details on the construction of abnormal returns.

estimated β_1 coefficients from Tables 2 and 3, along with their 95% confidence intervals, in Figures 2 and 3, respectively.

Beginning with Table 2, the coefficient on the triple-interaction term, β_1, is negative and statistically significant at all horizons from 1 day to 50 days following the issuance, indicating that an increase in the $\overline{NewsRatio}$ in the quiet period for WKSI issuers after the SOR is associated with a lower buy-and-hold abnormal return. Even more strikingly, β_1 is actually positive and significant in the pre-issuance period at the 30 day horizon, which is consistent with a higher $\overline{NewsRatio}$ in the pre-issuance period driving up abnormal returns in the pre-issuance period. After the issuance, cumulative abnormal returns fall almost monotonically with the horizon, and remain significantly negative even 50 days after issuance.

I also present the overall effect of an increase in the $\overline{NewsRatio}$ in the quiet period on a WKSI after the SOR in the second to last row, with associated p-values of an F-test under the null that the sum of the relevant coefficients is zero in the row below. This effect is both statistically and economically significant at both short (5 day) and longer (30 or more day) horizons. Both the magnitude and the significance are largest at a 50-day horizon, with buy-and-hold cumulative abnormal returns of -0.123 (approximately -9% annualized, with a p-value < 0.001).

This pattern is completely different for the shelf sample, presented in Table 3. As before, I plot the estimated β_1 coefficients, as well as their 95% confidence intervals, and present them in Figure 3. In particular, there is no evidence of a negative effect on buy-and-hold returns. Both the triple interaction and the net effect are statistically indistinguishable

from zero at any conventional significance level, and at longer horizons, many of the point estimates are positive (although insignificant or marginally significant).

Taken together, these results provide no evidence that the relationship between pre-issuance $\overline{NewsRatio}$ and post-issuance abnormal returns changed for WKSIs (relative to non-WKSIs) after the SOR among shelf issuances. At the same time, there is substantial evidence of a change in this relationship among the non-shelf issuances. This suggests that the effect of pre-issuance news changed – specifically, a higher level of such news is associated with relatively lower post-issuance returns – for WKSIs (relative to non-WKSIs) after the SOR among the non-shelf sample. Because the relationship exists only for non-shelf issuances, it is most consistent with active information management.

There are different possible explanations for these results. One possibility is that the quality of this news disseminated into the market may have changed. For example, it may be the case that, because of the relaxation of the gun-jumping rules, managers of WKSI firms feel less constrained in seeking to push positive stories to media outlets in the pre-issuance period. Alternatively, the average type of news that is being disseminated may have changed, shifting towards news that is, on average, associated with a subsequent (i.e. post-issuance) decline in returns. The null results on the shelf sample can be interpreted as an absence of evidence of what would be most consistent with an increase in passive information management. Importantly, this is not the same as an absence of evidence of information management, or even of passive information management, in the shelf sample. Rather, it simply fails to find evidence that and such information management has *changed* for WKSIs since the SOR, at least with respect to my $\overline{NewsRatio}$ measure.

It is also worth noting that the results for the non-shelf sample in this section indicate a divergence between WKSIs and non-WKSIs with respect to the relationship between the pre-issuance information environment and post-issuance abnormal returns after the SOR. Econometrically, this wedge could be driven by either the WKSIs or the non-WKSI issuances in the sample. While it is most natural, given the setting, to assume that the effect is primarily driven by the WKSIs, it is plausible that the effect of the SOR could be showing up in either group. For example, the market could be attempting to adjust rationally to the new information environment brought about by the regulatory change, but may only have succeeded in doing so imperfectly. This is particularly plausible given the cognitive challenges associated with disentangling the information captured by the $\overline{NewsRatio}$ measure. I discuss this possibility in more detail in the next subsection.

3.3. *Subsample Analysis: WKSIs and Non-WKSIs*

I begin by splitting my sample between WKSI and non-WKSI issuers. Unlike the triple interaction framework in Part 3.2, this approach does not allow me to exploit the differences between WKSIs and non-WKSIs for econometric identification. It does, however, allow me to further investigate what is driving the wedge I observe between WKSIs and non-WKSIs in Part 3.2. I therefore estimate the following regression separately for WKSIs and non-WKSIs in the shelf and non-shelf samples, for a total of four different regressions:

$$AR_{i,j,H} = \alpha + \beta_1 \times \overline{NewsRatio}_{i,j} \times After_j + \beta_2 \times \overline{NewsRatio}_{i,j} + \beta_3 \times After_j + \varepsilon \quad (2)$$

where and $AR_{i,j,H}$ and $After_j$ are defined as in equation 1.

Focusing on the non-shelf subsample, I find that an increase in pre-issuance $\overline{NewsRatio}$ is *less negatively* associated with post-issuance abnormal returns for non-WKSIs after the SOR. The coefficients in Table 5 indicate that while the relationship between $\overline{NewsRatio}$ and post-issuance abnormal returns is negative in the pre-SOR period, and statistically significantly so at longer horizons (20 or more days), the coefficient on $\overline{NewsRatio} \times After$ is positive and statistically significant at all post-issuance horizons. The positive coefficient on the interaction term is large enough that it completely offsets the negative coefficient on $\overline{NewsRatio}$, although the sum is not statistically significant at longer horizons (beyond 30 days).

Interestingly, the results for the WKSI sample, presented in Table 4, are essentially the mirror image of those in Table 5: the coefficient on the interaction term $\overline{NewsRatio} \times After$ is strongly negative (both in magnitude and statistical significance) at longer horizons (beyond 30 days), and is sufficiently negative that it overwhelms a positive (albeit insignificant) coefficient on $\overline{NewsRatio}$, leading to a negative and statistically significant negative net relationship at longer horizons.

These results are consistent with a market that is trying to adjust to a new information environment around SEOs, but has not yet succeeded in fully doing so. In particular, the results are consistent with a market that under-adjusts to the new information environment before SEOs by WKSIs (the treated firms), while correctly interpreting, on average, the information environment before non-WKSIs (the untreated firms). Before the SOR, the market appears to have been "too optimistic" when it came to non-WKSIs, and was more or less accurate with respect to WKSIs, on average. After the SOR, it is more or less accurate with respect to non-WKSIs, having corrected its former optimism, and is "too

optimistic" for WKSIs. This is perhaps not entirely shocking: making this adjustment is extremely difficult even on average, and doing so for each subsample may be infeasible. Consistent with Table 3, when I conduct this analysis on the self sample I find essentially null effects across the board. For completeness, these results are presented in Tables IA.12 and IA.13.

4. Robustness and Additional Analysis

The analysis in Part 3.2 presented evidence that the relationship between my *NewsRatio* measure in the pre-issuance period and post-issuance abnormal returns changed for non-shelf issuances by WKSIs after the SOR, and I have argued that the evidence is consistent with information management. In this section, I begin by discussing several variations on the main analysis in Part 3.2. I then present some additional analysis relating to my *NewsRatio* measure, including investigating how it differs from simply using news stories or press releases separately. Finally, I consider the possibility that my results are driven by a change in the relative behavior of shelf offerings, rather than a change in the relationship between news in the pre-issuance period and post-issuance returns.

4.1. *Alternative Specifications for the Analysis in Part 3.2*

I consider several different specifications of the regression analysis described in Part 3.2. First, recognizing that using 120 days between filing and issuance as a cutoff for categorizing issuances as shelf or non-shelf is arbitrary, I repeat the analysis using 90 days as a cutoff.[15] I present the results from re-estimating the model described in equation 1 in Tables IA.1 and IA.2. I continue to find robustly negative coefficients on the triple

[15]This cutoff has the added benefit of being consistent with the inclusion rule used in Shroff, Sun, White, and Zhang (2013).

interaction terms in the non-shelf sample. While the coefficients in Table IA.1 are somewhat smaller at longer horizons (20 or more days) than those in Table 2, they are larger at shorter horizons (1, 5 and 10 days). Similarly, while the level of statistical significance drops at some horizons (notably 50 and 20 days), it increases at others (most noticeably, 10 days). The sum of the relevant coefficients continues to be negative, and both the magnitude and statistical significance continue to increase with horizon. Turning to the shelf sample, the result in Table IA.2 indicate that the coefficient of interest remains statistically indistinguishable from zero using this revised definition of "shelf."

Next, I reestimate the results using the statutory quiet period rather than the synthetic quiet period, and present the results in Tables IA.3 and IA.4. The results are broadly consistent with the results in Part 3.2. Beginning with Table IA.3, the coefficient on the triple-interaction term remains negative and statistically significant in the post-issuance period at all horizons (albeit only marginally so at 50 days). While the coefficients are somewhat smaller in magnitude than those in Table 2, these differences are small for horizons of up to 30 days after the issuance date. As in Table 2, the sum of the relevant coefficients is also negative at all post-issuance horizons. The statistical significance of this estimated sum increases with the holding period: an F-test returns a p-value of 0.04 for a 20 day holding period, which falls to 0.004 at 50 days.

The results in Table IA.4 are also consistent with those in Table 3, in the sense that at most horizon, the coefficient on the triple interaction is statistically indistinguishable from zero, and in the few cases where they are not, they are positive. As in Table 3, the estimates are statistically significant only at a few intermediate horizons (here, 20 and 30 days), and not a shorter or longer horizons. It is therefore difficult to interpret them as

evidence of a systematic relationship. Moreover, while both tables generally display a null result, the point estimates are very different at many horizons. For example, in each of columns 5, 6 and 7, the magnitudes of the estimated β_1 coefficient are off by more than a factor of 3, and in one case, the estimates are pointing is opposite directions. This should not be particularly surprising, since the two regressions use *NewsRatio* measures from very different time periods. Since shelf issuances, by construction, occur at least four months after the filing date, it is unclear what mechanism might link the information environment in the statutory quiet period to post-issuance returns. To the extent that the SOR affected these issuances, the more likely channel is through the relaxation of the shelf offering rules, not any changes to the information environment around the filing date.

Finally, rather than constructing abnormal returns using a 3-factor model, I reestimate the results using 1 and 4 factor models. The results in Tables IA.5 and IA.6, which refer to the 1 and 4 factor models for the non-shelf sample, are consistent with those in 2: the point estimates of interest are of comparable size and generally similar levels of statistical significance. The same is true for the shelf sample, presented in Tables IA.7 and IA.8: using the 1 and 4 factor models, the results are consistent with those in Table 3.

4.2. *Further Discussion of NewsRatio*

As previously discussed, the *NewsRatio* measure I developed in Part 3.1 is a key component of my analysis. In particular, my use of this measure is the single most important differences between my analysis and the analyses in both Shroff, Sun, White, and Zhang (2013) and Clinton, White, and Woidtke (2014), both of which are primarily focused on direct firm-issued information.

In this subsection, I first confirm that my results are in fact driven by my choice of this measure. To do so, I begin by repeating the analysis in Part 3.2 using press the $\overline{Releases}$ variable, which is the equivalent of using the denominator of $\overline{NewsRatio}$. This measure, which captures press releases during the quiet period, can be interpreted as a direct measure of firm-issued news, and is conceptually similar to the primary information variables used in both prior papers. The results, contained within Tables IA.9 and IA.10, are a series of null results for the entire post-issuance period. There is, in other words, no evidence that press releases by firms during the pre-issuance period differentially affect the post-issuance abnormal returns for WKSIs after the SOR for either shelf or the non-shelf issuances. This null result can therefore be interpreted as independent confirmation of the null results relating to post-issuance returns in both of these prior papers, as well as evidence that my use of *NewsRatio* as my information measure is the main driver of the difference between my results and theirs.[16]

Because my results hinge on the use of my *NewsRatio* measure, I investigate its behavior in the pre-issuance period. To do so, I begin by estimating the following regression:

$$NewsRatio_{i,t} = a_t + a_i + \varepsilon_{i,t} \tag{3}$$

for each firm i, where $NewsRatio_{i,t}$ is the *NewsRatio* of firm i on date t, and a_t and a_i are day and firm fixed effects, respectively. I then construct a $SurpriseNews_{i,t}$ variable, defined as

$$SurpriseNewsRatio_{i,t} = \varepsilon_{i,t} \tag{4}$$

[16]For completeness, I also reestimate the regressions using the $\overline{NewsStories}$. While I find some statistically significant results that are consistent with my baseline results in Part 3.2 using this measure, the results are not robust to many of the alternative specifications discussed in Part 4.1.

which is essentially the demeaned *NewsRatio* variable. Demeaning in this way allows me to look at deviations from the firm's "normal" level of news coverage, as well as the average amount of news coverage overall in the market, on a given day.

While demeaning in this way allows me to make more sensible comparisons, the demeaned variable remains highly skewed, with an unconditional skewness of 21.9. Even within categories of WKSI / non-WKSI, and before / after the SOR, the conditional skewness remains high, ranging from 9.9 (for non-WKSIs before the SOR) to 22 (for WKSIs after the SOR). This skewness is primarily driven by extreme positive values: while the unconditional 1st and 99th percentile values are -.77 and 1.9, respectively, the extreme values are -6.4 and 73.2. Like the skew, the presence of extreme positive outliers exists in all four subsamples. Because of these extreme positive values, after arranging the dates in event time, I trim the top percentile by event-day. This allows me to significantly reduce the skew of the data while retaining 99% of the observations.[17]

I then average the trimmed variable into 25 days windows in event time, where 0 is the date of issuance j. I choose 25 day windows because the union of the two 25-day periods immediately preceding the issuance date (t=-2 and t=-1) corresponds to the synthetic quiet period discussed in Part 2. *NewsRatio* in this period therefore corresponds to the news measure used in my primary analysis in Part 3.2. I present the results, along with 95% confidence intervals in Figures 4 and 5 for WKSIs and non-WKSIs, respectively. To facilitate interpretation, the dark gray shaded region corresponds to the synthetic quiet period and the light gray shaded region corresponds to the period immediately before

[17]The unconditional skewness of the trimmed variable falls to 3.8, with conditional values ranging from 2.9 (WKSIs after the SOR) to 4.7 (non-WKSIs before the SOR).

that. I include the light gray shaded region to account for the ambiguity around the beginning of the quiet period in the pre-SOR period, discussed in Part 1.2.

Prior to the SOR, there is a pronounced spike in the *SurpriseNewsRatio* shortly before the beginning of the quiet period, represented by the dashed line in Figure 4. The dashed line then falls, rising again after the issuance date. After the reform relaxed the restrictions on quiet-period communications, however, this measure rises substantially in the period immediately before the issuance, represented by the solid line. The bars representing 95% confidence intervals confirm that these means are statistically distinguishable.[18]

In contrast, the dashed and solid lines in Figure 5, which presents the same results for non-WKSIs, show a markedly different pattern. Here, there is no difference between the two groups in any of the pre-offering periods. The two lines do appear to diverge in the period immediately *after* the issuance date, when the gun jumping rules no longer apply. While prior to the SOR, *SurpriseNewsRatio* increased in the post-offering period for non-WKSIs, it remained at normal levels in that period. While it is interesting, the fact that this deviation occurs after the issuance means that it is unlikely to be driving abnormal returns, particularly those immediately after the issuance.

The results in Figures 4 and 5 suggest that there may have been a change in the information environment in the pre-issuance period for WKSIs after the SOR. While a difference in differences regression returns only marginally significant results,[19] the results in this subsection are consistent with the view that my *NewsRatio* measure is picking up

[18]While untrimmed data demonstrate a similar pattern, the difference is not statistically significant at conventional levels.

[19]The coefficient on $WKSI \times after$ using data from the 25-day period immediately preceding an issuance is equal to 1.81, p = 0.071. I report the full difference in differences regression in Table IA.11.

a change in the information environment for WKSIs in the pre-issuance period after the SOR.

Of course, a higher *NewsRatio* for WKSIs after the SOR is not, on its own, sufficient to generate the results in Part 3.2. Those results indicate that the *relationship* between pre-issuance *NewsRatio* and post-issuance abnormal returns is different for WKSIs after the SOR. If differences in abnormal returns for WKSIs after the SOR were driven solely by a higher level of *NewsRatio*, on average, in the pre-issuance period, this would lead to a *triple interaction* coefficient of zero, and the change in the dependent variable would be captured entirely by the other terms in the regression. Nonetheless, the fact that I find evidence that my *NewsRatio* measure is elevated for WKSIs in the quiet period after the SOR in consistent with the idea that it is capturing something about the pre-issuance information environment that changes for WKSIs after the SOR, and supports its use in Part 3.2.

4.3. *Behavior of Shelf Offerings by WKSIs after the SOR*

Finally, I investigate the possibility that the SOR led to an overall change in the relative behavior of shelf offerings. To investigate this, I perform a different a triple-interaction analysis, and estimate the regression:

$$\begin{aligned} AR_{i,j,H} = \alpha &+ \beta_1 \times Shelf_{i,j} \times WKSI_{i,j} \times After_j + \beta_2 \times Shelf_{i,j} \times WKSI_{i,j} \\ &+ \beta_3 \times Shelf_{i,j} \times After_j + \beta_4 \times WKSI_{i,j} \times After_j \\ &+ \beta_5 \times Shelf_{i,j} + \beta_6 \times WKSI_{i,j} + \beta_7 \times After_j + \varepsilon \quad (5) \end{aligned}$$

where $Shelf_{i,j}$ is a dummy variable equal to one if issuance j by firm i is a shelf offering, and $AR_{i,j,H}$, $WKSI_{i,j}$ and $After_j$ are defined as in equation 1. The coefficient of the triple interaction, β_1, is the variable of interest: it captures the extent to which the relationship between shelf offerings and post-issuance abnormal returns changed for WKSIs after the SOR.

The results, presented in Table 6, show that this coefficient is not statistically distinguishable from zero at any horizon. This does not necessarily imply that shelf and non-shelf issuance are the same, only that the overall relationship between shelf and non-shelf status on post-issuance abnormal returns did not change for WKSIs after the SOR. While a negative β_1 coefficient could potentially have been interpreted as suggestive evidence consistent with a passive timing story, it would have been at best, an indirect test of that hypothesis. Alternatively, it could have been consistent with a change in the relative composition of shelf and non-shelf issuances along dimensions that are correlated with post-issuance abnormal returns. As such, while the results in Part 3.2 provide evidence that is consistent with active information management, I interpret this test as simply the absence of evidence of passive information management.

5. Conclusion

The 2005 Securities Offering Reform substantially expanded the scope for managers of large, well established firms to manage the information environment prior to equity issuances. Using a triple interaction methodology, I find that the *NewsRatio* in the pre-issuance period is more negatively associated with cumulative abnormal returns in the post-issuance period for non-shelf WKSI issuers after the SOR. This, in turn, suggests that investors are overpaying for these securities. Because this pattern is not present among

issuances that are likely to be shelf takedowns, I interpret this evidence as being most consistent with active information management, in which managers actively manage the information environment in the period immediately prior to the issuance. My findings cast doubt on the SEC's position that large, well established firms cannot successfully "condition the market," and suggest a role for regulatory scrutiny in the pre-offering period.

Appendix A. Construction of Abnormal Returns

I construct buy and hold cumulative abnormal returns using one, three, and four factor models in the following manner.[20] First, I obtain $\hat{\beta^M}$, where $M \in \{1, 3, 4\}$ from the following factor regressions: For $\hat{\beta}^1$, I estimate:

$$R_{k,s} = \alpha_{k,t} + \beta^1_{k,t} R_{m,s} + \varepsilon_{k,t} \tag{6}$$

for calendar days $s \in \{t - 250, t - 60\}$, where $R_{k,s}$ is the return on security k on day s, and $R_{m,s}$ is the CRSP value-weighted market return on day s. I then use these estimated $\hat{\beta}^1$ to compute the cumulative abnormal return for the period $[h, H]$ as:

$$AR^1_{k,t_{h,H}} = \left[\prod_{j=t+h}^{t+H}(1 + R_{k,j})\right] - 1 - \hat{\beta}^1_{k,t}\left(\left[\prod_{j=t+h}^{t+H}(1 + R_{m,j})\right] - 1\right) \tag{7}$$

Abnormal returns in the pre-period ($H < 0$) are calculated using returns from H to -1. Abnormal returns in the post period ($H \geq 0$) are calculated using returns from 0 to H.

I construct the cumulative abnormal returns for the three and four factor models in an analogous manner. I obtain my Fama-French 3-factor portfolio data, as well as my momentum portfolio data from Kenneth French's website. I estimate $\hat{\beta}^q$, where $q \in \{3, 4\}$ using:

$$R_{k,s} - R^f_s = \alpha_{k,t} + \sum_{f \in F^q} \beta^q_{f,k,t} f_s + \varepsilon_{k,t} \tag{8}$$

where R^f is the risk free rate, $F^3 = \{(R_{m,s} - R^f_s), HML_s, SMB_s\}$ and $F^4 = \{(R_{m,s} - R^f_s), HML_s, SMB_s, MOM_s\}$

I then construct cumulative abnormal returns as:

[20] I adapt this methodology from Niessner (2015).

$$AR^{q}_{k,t_{h,H}} = \left[\prod_{j=t+h}^{t+H} (1 + R_{k,j} - R^{f}_{j}) \right] - 1 - \sum_{f \in F^{q}} \hat{\beta}^{q}_{f,k,t} \left(\left[\prod_{j=t+h}^{t+H} (1 + f_{j}) \right] - 1 \right) \tag{9}$$

As with the one factor model, abnormal returns in the pre-period ($H < 0$) are calculated using returns from H to -1. Abnormal returns in the post period ($H \geq 0$) are calculated using returns from 0 to H.

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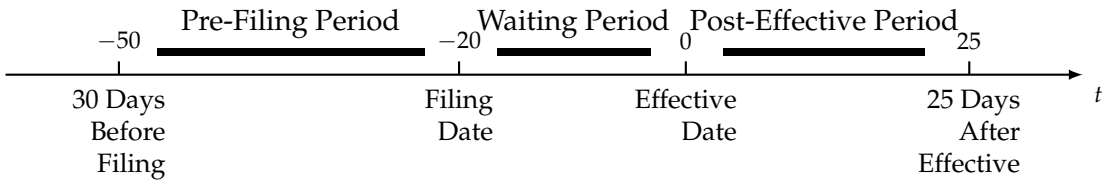

FIGURE 1. Registration Period Timeline

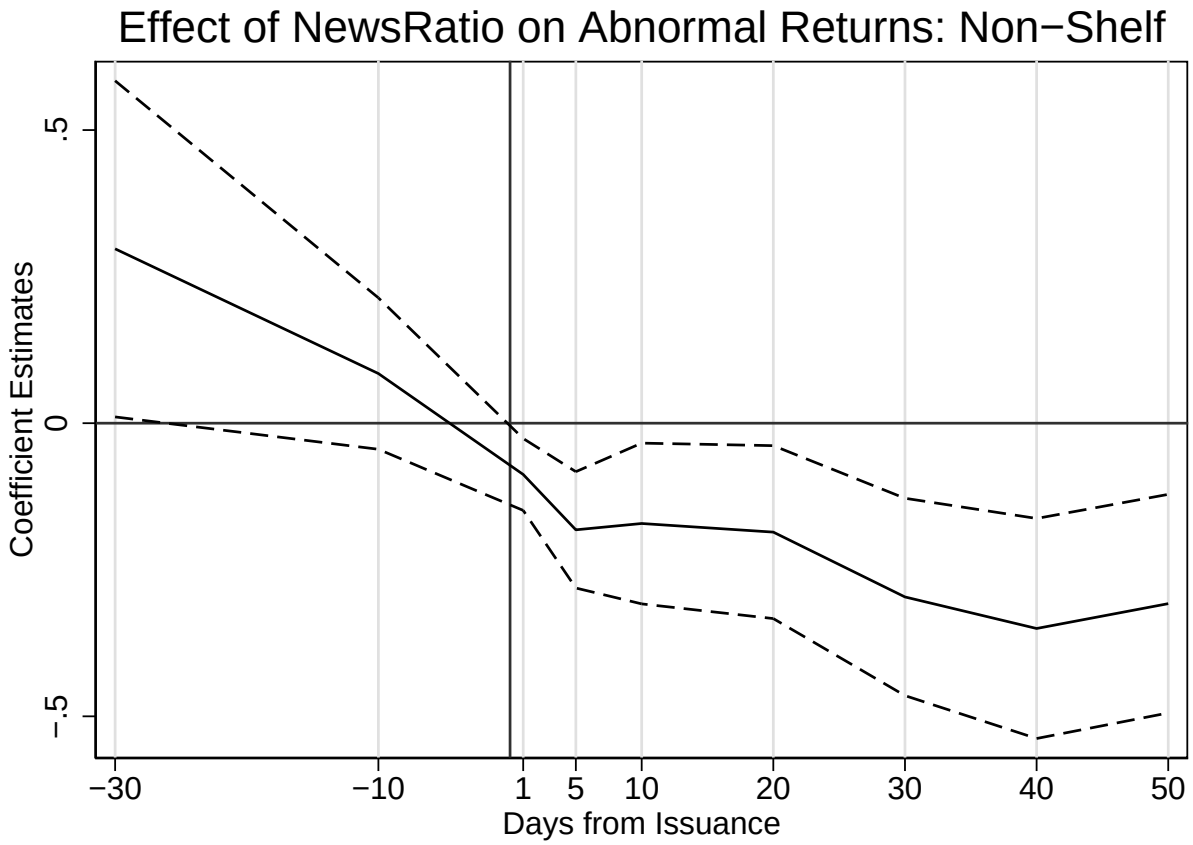

FIGURE 2. This figure plots point estimates, along with 95% confidence intervals, of the coefficients on $\overline{NewsRatio} \times WSKI \times After$ from the OLS regressions presented in Table 2.

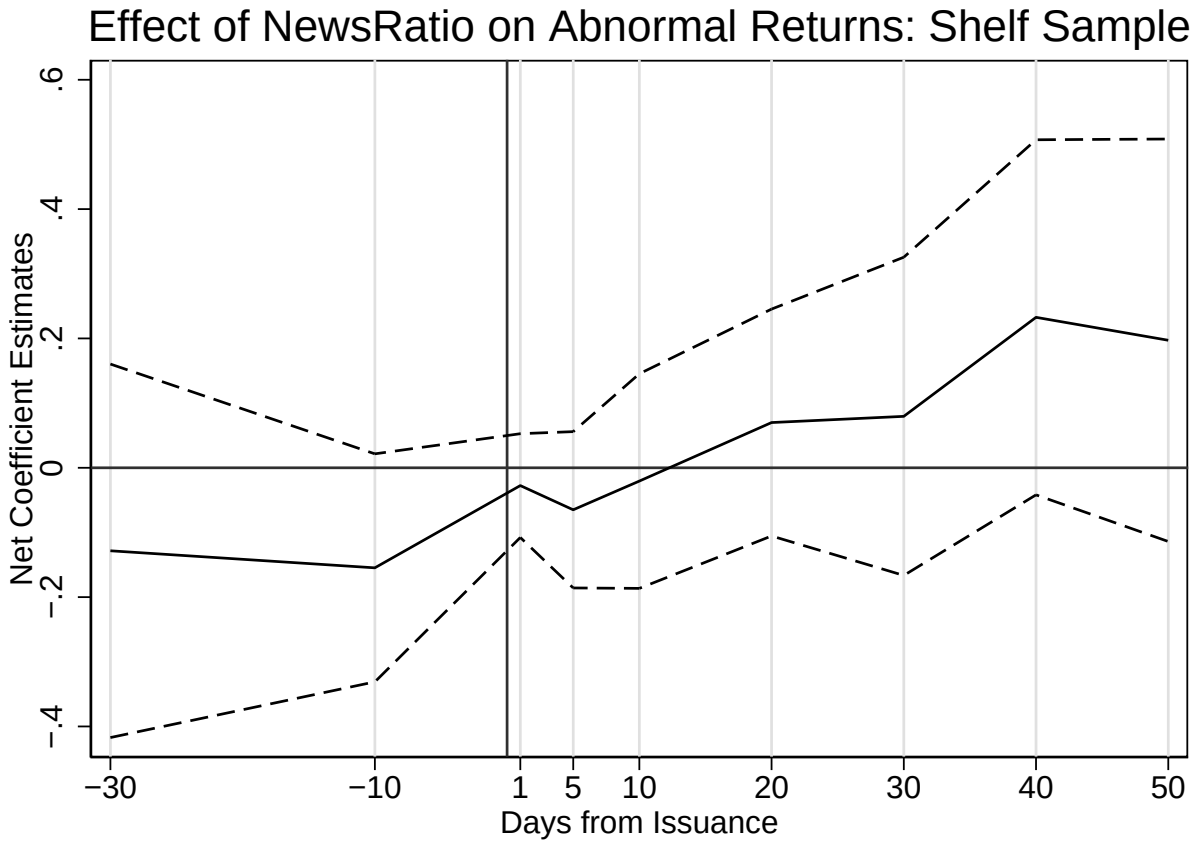

FIGURE 3. This figure plots point estimates, along with 95% confidence intervals, of the coefficients on $\overline{NewsRatio} \times WSKI \times After$ from the OLS regressions presented in Table 3.

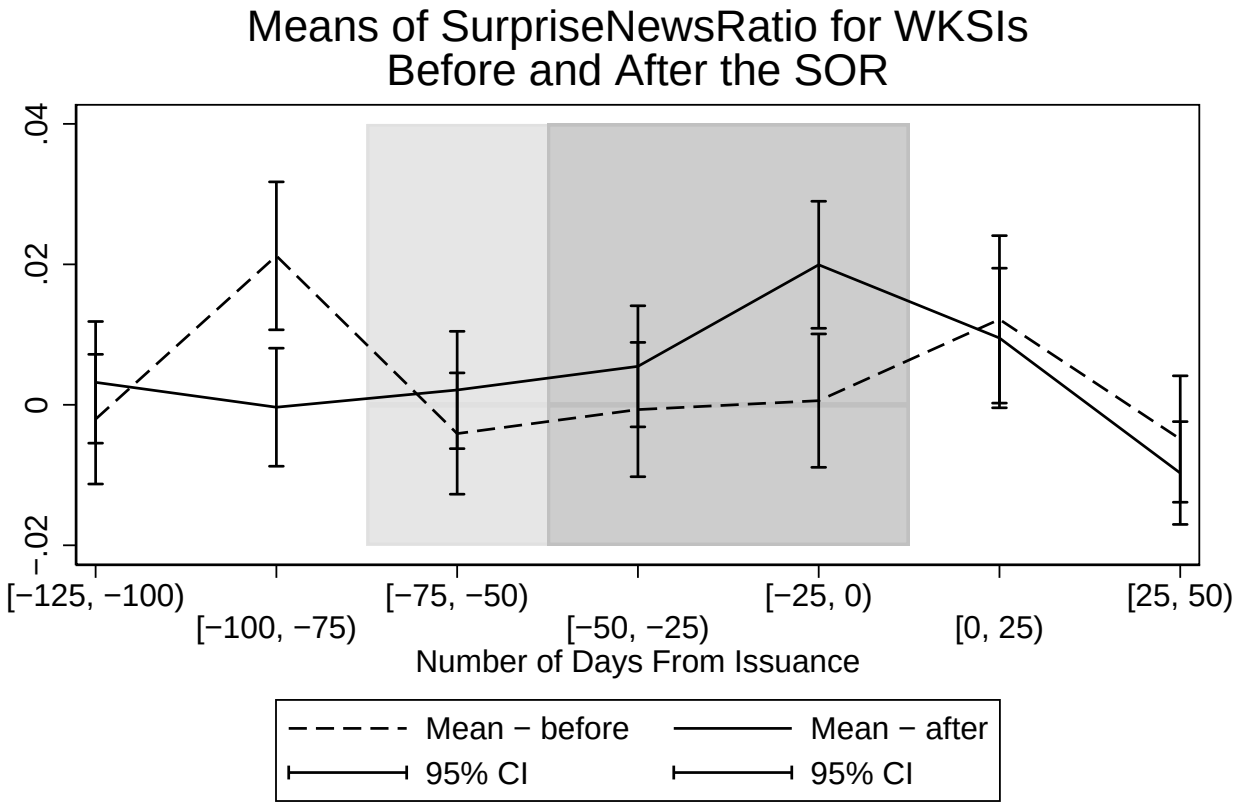

FIGURE 4. *SurpriseNewsRatio*, averaged across 25-day windows, before and after the SOR for WKSIs only. Vertical bars represent 95% confidence bars for each window. [-50, -25) and [-25, 0) represent the synthetic quiet period, and [-100, -75) and [-75, -50) represent the 50 days immediately prior to the synthetic quiet period.

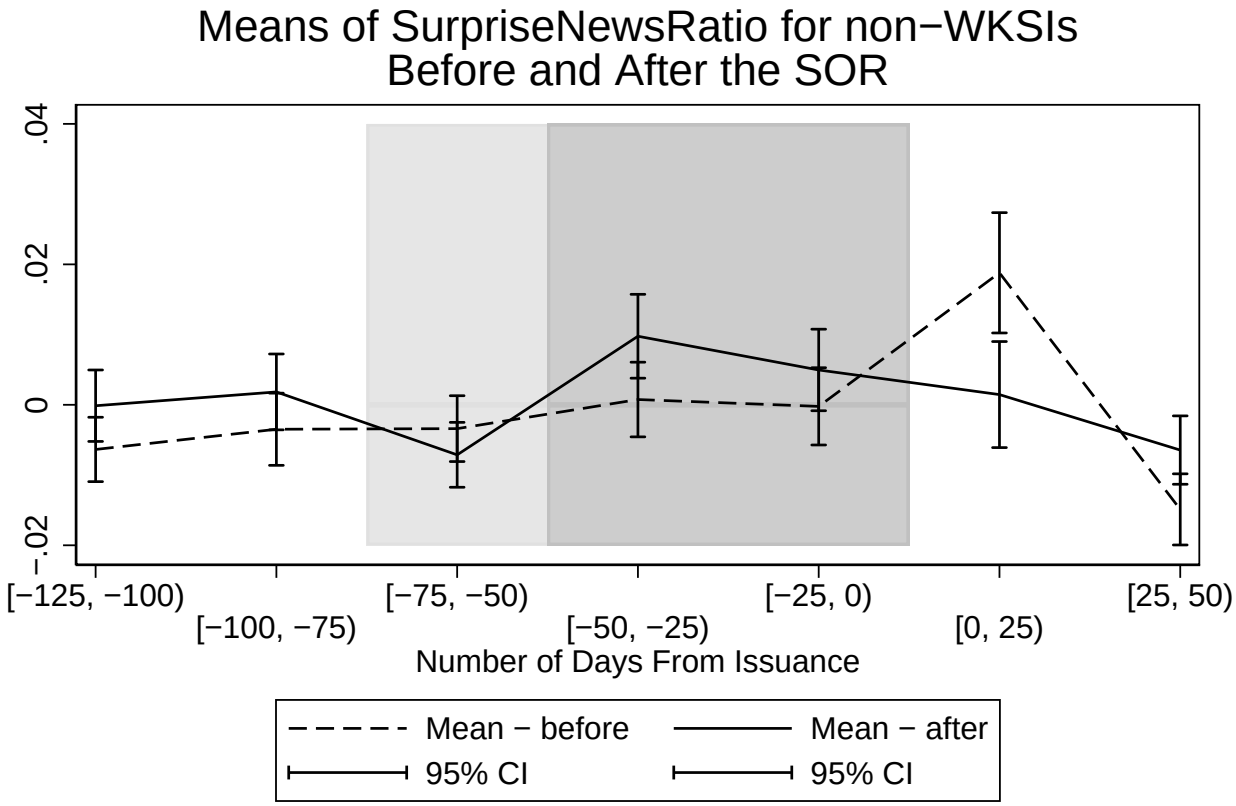

FIGURE 5. *SurpriseNewsRatio*, averaged across 25-day windows, before and after the SOR for non-WKSIs only. Vertical bars represent 95% confidence bars for each window. [-50, -25) and [-25, 0) represent the synthetic quiet period, and [-100, -75) and [-75, -50) represent the 50 days immediately prior to the synthetic quiet period.

TABLE 1. Summary of Communications and other Restrictions on WKSIs Before and After the SOR

Period	*Pre-2005 Reform*	*Post-2005 Reform*
Pre-Filing Period	Beginning not clearly defined	Begins 30 days before filing
	No oral or written communications between those involved with the offering and potential investors	WKSIs may communicate freely throughout the pre-filing period**
	Forward looking statements, opinions, and other "soft" information discouraged	Forward looking statements permitted
	Factual business information permitted	
	Certain topics expressly permitted, including normal advertising and periodic reporting	
	Changes to advertising or reporting may jeopardize the offer	
	Strict rules regarding how a firm may give notice about an upcoming issuance and information about the underwriter prohibited	
	Restrictions on brokers and dealers	Restrictions on brokers and dealers relaxed
Waiting Period	Written communications restricted to: -"tombstone" ads -preliminary prospectus (submitted to the SEC)* -summary prospectus (submitted to the SEC)* -certain broker/dealer reports	Free Writing Prospectuses permitted, provided that the information therein does not conflict with the registration statement or the issuer's fillings**
	-certain prescribed identifying statements	Permitted identifying statements broadened
	Oral communications ("road shows") before live audiences permitted	Road shows before live audiences may be re-broadcast widely
Post-Effective Period	Sales must be accompanied by a prospectus	Access equals delivery
	Communications must be accompanied by a prospectus	
Shelf-Registration	Valid for up to two years	Valid for up to three years
	Base prospectus reviewed and declared effective by the SEC	Effective immediately
	Initial filing contains information about issuer	Less information required
	Initial filing specifies type & value of securities	Initial filing need not specify value of securities
	Registration updated upon takedown	
	Could be used for SEOs and bonds, with additional restrictions on SEOs	(No change)
	All filing fees must be paid up front	"Pay as you go"

This summary draws heavily on Morrissey (2006).
*According to Morrissey, "both of these documents essentially contain information that would be in a final section 10 prospectus."
**Subject in certain cases to a filing requirement.

TABLE 2. Effect of *NewsRatio* on Abnormal Returns: Triple Interaction
Non-Shelf Sample

This table reports the coefficient estimates from OLS regressions, restricting attention to non-shelf issuances, defined as issuances that occurred within 120 days of the filing date. The dependent variables are cumulative abnormal returns estimated using a 3-factor model around the issuance date, which is normalized to 0. Accordingly, columns (1) and (2) present results where the dependent variable represents cumulative abnormal return of firm i around issuance j in the pre-issuance period and columns (3) through (9) present results where the dependent variable represents cumulative abnormal return of firm i around issuance j in the post-issuance period. $\overline{NewsRatio}$ represents $\frac{(1+\overline{News})}{(1+\overline{Releases})}$, where $\overline{News}$ ($\overline{Releases}$) represents the mean number of news articles about (press releases by) firm i in the 50-day period leading up to the date of issuance j. *WSKI* is a dummy variable equal to 1 if firm i was a WKSI at the time of issuance j. *After* is a dummy variable equal to 1 if issuance j by firm i occurred after the SOR. $\overline{NewsRatio}$ *On WKSI After* represents the sum of $\overline{NewsRatio} \times WSKI \times After + \overline{NewsRatio} + \overline{NewsRatio} \times WKSI + \overline{NewsRatio} \times After$, and *p-value* represents the p-value of an F-test under the null hypothesis that this sum is equal to zero. Standard errors are clustered by day. t-statistics are presented in parentheses. The symbols *, **, and *** denote significance at the 10%, 5%, and 1% level, respectively.

	(1) [-30, -1]	(2) [-10, -1]	(3) [0, 1]	(4) [0, 5]	(5) [0, 10]	(6) [0, 20]	(7) [0, 30]	(8) [0, 40]	(9) [0, 50]
$\overline{NewsRatio}$ × WSKI × After	0.297**	0.0847	-0.0874***	-0.182***	-0.171**	-0.186**	-0.296***	-0.350***	-0.308***
	(2.03)	(1.29)	(-2.79)	(-3.59)	(-2.45)	(-2.47)	(-3.45)	(-3.66)	(-3.24)
$\overline{NewsRatio}$	0.236*	0.112**	0.00709	-0.0481	-0.0690	-0.0967**	-0.154***	-0.178***	-0.173***
	(1.90)	(2.57)	(0.37)	(-1.31)	(-1.47)	(-2.24)	(-3.63)	(-3.34)	(-2.90)
WKSI	0.277**	0.0916*	0.0153	-0.0366	-0.0446	-0.0594	-0.146**	-0.202***	-0.179**
	(2.14)	(1.74)	(0.72)	(-0.86)	(-0.82)	(-0.94)	(-2.15)	(-3.14)	(-2.42)
After	0.266*	0.118**	-0.0924***	-0.167***	-0.164**	-0.198***	-0.259***	-0.249***	-0.195**
	(1.92)	(2.05)	(-3.22)	(-3.71)	(-2.56)	(-3.28)	(-3.83)	(-2.81)	(-2.29)
$\overline{NewsRatio}$ × WKSI	-0.254**	-0.0918*	-0.0177	0.0320	0.0380	0.0548	0.134**	0.197***	0.174**
	(-1.97)	(-1.75)	(-0.86)	(0.77)	(0.71)	(0.89)	(2.05)	(3.34)	(2.54)
$\overline{NewsRatio}$ × After	-0.255*	-0.126**	0.0876***	0.158***	0.161***	0.193***	0.256***	0.240***	0.183**
	(-1.86)	(-2.23)	(3.14)	(3.63)	(2.62)	(3.39)	(4.03)	(2.84)	(2.28)
WKSI × After	-0.314**	-0.0813	0.0880***	0.181***	0.170**	0.183**	0.299***	0.351***	0.318***
	(-2.11)	(-1.22)	(2.70)	(3.46)	(2.33)	(2.32)	(3.34)	(3.49)	(3.13)
Constant	-0.241*	-0.117***	-0.0107	0.0519	0.0763	0.110**	0.170***	0.195***	0.190***
	(-1.94)	(-2.68)	(-0.56)	(1.38)	(1.60)	(2.46)	(3.72)	(3.41)	(3.00)
Observations	865	865	865	865	865	865	865	865	865
R^2	0.018	0.016	0.037	0.031	0.018	0.014	0.018	0.018	0.016
Adjusted R^2	0.010	0.008	0.029	0.023	0.010	0.006	0.010	0.010	0.008
$\overline{NewsRatio}$ On WKSI After	0.0246	-0.0204	-0.0105	-0.0399	-0.0406	-0.0344	-0.0604	-0.0910	-0.123
p-value	0.521	0.244	0.366	0.0245	0.0601	0.0845	0.0287	0.0120	0.000874

TABLE 3. Effect of *NewsRatio* on Abnormal Returns: Triple Interaction
Shelf Sample

This table reports the coefficient estimates from OLS regressions, restricting attention to shelf issuances, defined as issuances that occurred more than 120 days after the filing date. The dependent variables are cumulative abnormal returns estimated using a 3-factor model around the issuance date, which is normalized to 0. Accordingly, columns (1) and (2) present results where the dependent variable represents cumulative abnormal return of firm i around issuance j in the pre-issuance period and columns (3) through (9) present results where the dependent variable represents cumulative abnormal return of firm i around issuance j in the post-issuance period. $\overline{NewsRatio}$ represents $\frac{(1+\overline{News})}{(1+\overline{Releases})}$, where $\overline{News}$ ($\overline{Releases}$) represents the mean number of news articles about (press releases by) firm i in the 50-day period leading up to the date of issuance j. *WSKI* is a dummy variable equal to 1 if firm i was a WKSI at the time of issuance j. *After* is a dummy variable equal to 1 if issuance j by firm i occurred after the SOR. $\overline{NewsRatio}$ *On WKSI After* represents the sum of $\overline{NewsRatio} \times WSKI \times After + \overline{NewsRatio} + \overline{NewsRatio} \times WKSI + \overline{NewsRatio} \times After$, and *p-value* represents the p-value of an F-test under the null hypothesis that this sum is equal to zero. Standard errors are clustered by day. t-statistics are presented in parentheses. The symbols *, **, and *** denote significance at the 10%, 5%, and 1% level, respectively.

	(1) [-30, -1]	(2) [-10, -1]	(3) [0, 1]	(4) [0, 5]	(5) [0, 10]	(6) [0, 20]	(7) [0, 30]	(8) [0, 40]	(9) [0, 50]
$\overline{NewsRatio}$ × WSKI × After	-0.128	-0.155*	-0.0275	-0.0649	-0.0205	0.0700	0.0796	0.233*	0.197
	(-0.87)	(-1.72)	(-0.67)	(-1.05)	(-0.24)	(0.78)	(0.63)	(1.66)	(1.24)
$\overline{NewsRatio}$	0.0232	-0.0479	-0.0300	-0.0519	0.00834	0.0105	-0.0256	0.162**	0.125*
	(0.25)	(-0.93)	(-1.10)	(-1.34)	(0.16)	(0.22)	(-0.44)	(2.14)	(1.76)
WKSI	0.0266	-0.0639	-0.00682	-0.0354	0.0467	0.0347	0.0196	0.181**	0.146
	(0.24)	(-0.99)	(-0.20)	(-0.76)	(0.77)	(0.60)	(0.27)	(2.04)	(1.59)
After	-0.0608	-0.0898	-0.0512	-0.0978	-0.0582	0.0139	0.00923	0.232*	0.183
	(-0.44)	(-1.05)	(-1.21)	(-1.53)	(-0.69)	(0.16)	(0.08)	(1.68)	(1.18)
$\overline{NewsRatio}$ × WKSI	-0.00948	0.0802	0.0106	0.0314	-0.0454	-0.0408	-0.0264	-0.182**	-0.155*
	(-0.09)	(1.30)	(0.36)	(0.75)	(-0.80)	(-0.78)	(-0.40)	(-2.23)	(-1.90)
$\overline{NewsRatio}$ × After	0.0725	0.103	0.0440	0.0846	0.0487	-0.0255	-0.0177	-0.231*	-0.194
	(0.53)	(1.24)	(1.14)	(1.42)	(0.61)	(-0.31)	(-0.15)	(-1.73)	(-1.31)
WKSI × After	0.123	0.147	0.0251	0.0687	0.0249	-0.0546	-0.0754	-0.239	-0.182
	(0.80)	(1.59)	(0.55)	(1.03)	(0.28)	(-0.57)	(-0.57)	(-1.64)	(-1.09)
Constant	-0.00487	0.0377	0.0238	0.0482	-0.0151	-0.00664	0.0346	-0.160*	-0.121
	(-0.05)	(0.70)	(0.74)	(1.11)	(-0.27)	(-0.13)	(0.53)	(-1.94)	(-1.49)
Observations	543	543	543	543	543	543	543	543	543
R^2	0.008	0.021	0.013	0.013	0.008	0.006	0.005	0.013	0.009
Adjusted R^2	-0.005	0.009	0.001	0.000	-0.005	-0.007	-0.008	0.000	-0.004
$\overline{NewsRatio}$ On WKSI After	-0.0421	-0.0191	-0.00290	-0.000796	-0.00886	0.0141	0.00986	-0.0185	-0.0270
p-value	0.0317	0.0282	0.743	0.956	0.691	0.641	0.792	0.588	0.558

TABLE 4. Difference in Differences, WKSIs: Effect of *NewsRatio* on Abnormal Returns
Non-Shelf Sample

This table reports the coefficient estimates from OLS regressions, restricting attention to non-shelf issuances, defined as issuances that occurred no more than 120 days after the filing date, by firms that were WKSIs at the time of the issuance. The dependent variables are cumulative abnormal returns estimated using a 3-factor model around the issuance date, which is normalized to 0. Accordingly, columns (1) and (2) present results where the dependent variable represents cumulative abnormal return of firm i around issuance j in the pre-issuance period and columns (3) through (9) present results where the dependent variable represents cumulative abnormal return of firm i around issuance j in the post-issuance period. $\overline{NewsRatio}$ represents $\frac{(1+\overline{News})}{(1+\overline{Releases})}$, where $\overline{News}$ ($\overline{Releases}$) represents the mean number of news articles about (press releases by) firm i in the 50-day period leading up to the date of issuance j. *After* is a dummy variable equal to 1 if issuance j by firm i occurred after the SOR. $\overline{NewsRatio} + \overline{NewsRatio} \times After$ represents the sum of $\overline{NewsRatio}$ and $\overline{NewsRatio} \times After$, and *p-value* represents the p-value of an F-test under the null hypothesis that this sum is equal to zero. Standard errors are clustered by day. t-statistics are presented in parentheses. The symbols *, **, and *** denote significance at the 10%, 5%, and 1% level, respectively.

	(1) [-30, -1]	(2) [-10, -1]	(3) [0, 1]	(4) [0, 5]	(5) [0, 10]	(6) [0, 20]	(7) [0, 30]	(8) [0, 40]	(9) [0, 50]
$\overline{NewsRatio} \times$ After	0.0423	-0.0410	0.000113	-0.0237	-0.00969	0.00753	-0.0401	-0.111**	-0.124**
	(0.83)	(-1.14)	(0.01)	(-0.90)	(-0.29)	(0.15)	(-0.70)	(-2.42)	(-2.43)
$\overline{NewsRatio}$	-0.0177	0.0206	-0.0106	-0.0161	-0.0309	-0.0419	-0.0203	0.0196	0.00103
	(-0.53)	(0.66)	(-1.18)	(-0.83)	(-1.25)	(-0.94)	(-0.41)	(0.70)	(0.03)
After	-0.0482	0.0365	-0.00441	0.0143	0.00566	-0.0145	0.0402	0.103**	0.122**
	(-0.91)	(1.01)	(-0.28)	(0.51)	(0.16)	(-0.29)	(0.69)	(2.15)	(2.24)
Constant	0.0363	-0.0258	0.00464	0.0152	0.0317	0.0509	0.0234	-0.00706	0.0109
	(1.06)	(-0.82)	(0.47)	(0.74)	(1.21)	(1.12)	(0.46)	(-0.23)	(0.28)
Observations	310	310	310	310	310	310	310	310	310
R^2	0.003	0.010	0.009	0.035	0.020	0.012	0.014	0.029	0.031
Adjusted R^2	-0.007	0.001	-0.001	0.026	0.011	0.003	0.004	0.019	0.021
$\overline{NewsRatio} + \overline{NewsRatio} \times After$	0.0246	-0.0204	-0.0105	-0.0399	-0.0406	-0.0344	-0.0604	-0.0910	-0.123
p-value	0.522	0.245	0.367	0.0252	0.0611	0.0858	0.0294	0.0125	0.000962

TABLE 5. Difference in Differences, Non-WKSIs: Effect of *NewsRatio* on Abnormal Returns
Non-Shelf Sample

This table reports the coefficient estimates from OLS regressions, restricting attention to non-shelf issuances, defined as issuances that occurred no more than 120 days after the filing date, by firms that were non-WKSIs at the time of the issuance. The dependent variables are cumulative abnormal returns estimated using a 3-factor model around the issuance date, which is normalized to 0. Accordingly, columns (1) and (2) present results where the dependent variable represents cumulative abnormal return of firm i around issuance j in the pre-issuance period and columns (3) through (9) present results where the dependent variable represents cumulative abnormal return of firm i around issuance j in the post-issuance period. $\overline{NewsRatio}$ represents $\frac{(1+\overline{News})}{(1+\overline{Releases})}$, where $\overline{News}$ ($\overline{Releases}$) represents the mean number of news articles about (press releases by) firm i in the 50-day period leading up to the date of issuance j. *After* is a dummy variable equal to 1 if issuance j by firm i occurred after the SOR. $\overline{NewsRatio}$ + $\overline{NewsRatio}$ $\times$ *After* represents the sum of $\overline{NewsRatio}$ and $\overline{NewsRatio}$ $\times$ *After* , and *p-value* represents the p-value of an F-test under the null hypothesis that this sum is equal to zero. Standard errors are clustered by day. t-statistics are presented in parentheses. The symbols *, **, and *** denote significance at the 10%, 5%, and 1% level, respectively.

	(1) [-30, -1]	(2) [-10, -1]	(3) [0, 1]	(4) [0, 5]	(5) [0, 10]	(6) [0, 20]	(7) [0, 30]	(8) [0, 40]	(9) [0, 50]
$\overline{NewsRatio}$ $\times$ After	-0.255*	-0.126**	0.0876***	0.158***	0.161***	0.193***	0.256***	0.240***	0.183**
	(-1.87)	(-2.23)	(3.14)	(3.64)	(2.62)	(3.40)	(4.03)	(2.85)	(2.28)
$\overline{NewsRatio}$	0.236*	0.112**	0.00709	-0.0481	-0.0690	-0.0967**	-0.154***	-0.178***	-0.173***
	(1.91)	(2.57)	(0.37)	(-1.31)	(-1.47)	(-2.24)	(-3.63)	(-3.34)	(-2.90)
After	0.266*	0.118**	-0.0924***	-0.167***	-0.164**	-0.198***	-0.259***	-0.249***	-0.195**
	(1.92)	(2.06)	(-3.22)	(-3.71)	(-2.57)	(-3.28)	(-3.84)	(-2.81)	(-2.29)
Constant	-0.241*	-0.117***	-0.0107	0.0519	0.0763	0.110**	0.170***	0.195***	0.190***
	(-1.94)	(-2.69)	(-0.56)	(1.38)	(1.61)	(2.47)	(3.73)	(3.42)	(3.00)
Observations	555	555	555	555	555	555	555	555	555
R^2	0.018	0.018	0.044	0.025	0.013	0.012	0.017	0.014	0.010
Adjusted R^2	0.013	0.012	0.039	0.020	0.008	0.007	0.011	0.008	0.005
$\overline{NewsRatio}$ + $\overline{NewsRatio}$ $\times$ *After*	-0.0188	-0.0133	0.0946	0.110	0.0924	0.0966	0.102	0.0617	0.0105
p-value	0.745	0.708	0.00000492	0.00000308	0.0206	0.00952	0.0318	0.344	0.845

TABLE 6. Triple Difference: Effect of Shelf Issuances by WKSIs on Abnormal Returns After the SOR

This table reports the coefficient estimates from OLS regressions. The dependent variables are cumulative abnormal returns estimated using a 3-factor model around the issuance date, which is normalized to 0. Accordingly, columns (1) and (2) present results where the dependent variable represents cumulative abnormal return of firm i around issuance j in the pre-issuance period and columns (3) through (9) present results where the dependent variable represents cumulative abnormal return of firm i around issuance j in the post-issuance period. *Shelf* is a dummy variable equal to 1 if issuance j by firm i was a shelf issuance, defined as an issuance that occurred within 120 days of the filing date. *WSKI* is a dummy variable equal to 1 if firm i was a WKSI at the time of issuance j. *After* is a dummy variable equal to 1 if issuance j by firm i occurred after the SOR. Standard errors are clustered by day. t-statistics are presented in parentheses. The symbols *, **, and *** denote significance at the 10%, 5%, and 1% level, respectively.

	(1) [-30, -1]	(2) [-10, -1]	(3) [0, 1]	(4) [0, 5]	(5) [0, 10]	(6) [0, 20]	(7) [0, 30]	(8) [0, 40]	(9) [0, 50]
WSKI × Shelf × After	0.00115	-0.0152	-0.000604	0.00941	0.0121	0.0250	0.0119	0.00284	0.0152
	(0.03)	(-0.92)	(-0.06)	(0.69)	(0.69)	(1.13)	(0.45)	(0.10)	(0.43)
WSKI × After	-0.0108	0.00304	-0.000980	-0.00450	-0.00482	-0.00553	-0.00367	-0.00848	-0.00000657
	(-0.62)	(0.34)	(-0.18)	(-0.55)	(-0.45)	(-0.42)	(-0.24)	(-0.49)	(-0.00)
WSKI × Shelf	-0.00166	0.0205*	0.00563	0.0000154	0.00522	-0.00366	0.000491	-0.00438	-0.0106
	(-0.08)	(1.71)	(0.78)	(0.00)	(0.43)	(-0.24)	(0.03)	(-0.22)	(-0.47)
Shelf × After	0.00247	0.0229*	-0.00343	-0.00623	-0.0102	-0.00970	-0.00819	0.00524	-0.00257
	(0.11)	(1.74)	(-0.43)	(-0.53)	(-0.70)	(-0.56)	(-0.39)	(0.23)	(-0.09)
Shelf	0.0203	-0.00754	-0.00317	-0.00767	-0.0131	-0.00831	-0.00465	-0.00969	-0.00906
	(1.28)	(-0.78)	(-0.49)	(-0.85)	(-1.26)	(-0.66)	(-0.31)	(-0.56)	(-0.46)
WKSI	0.0194*	-0.000837	-0.00285	-0.00469	-0.00693	-0.00500	-0.0109	-0.00123	-0.00305
	(1.76)	(-0.13)	(-0.93)	(-0.89)	(-1.06)	(-0.58)	(-1.10)	(-0.11)	(-0.25)
After	0.00711	-0.00956	-0.00353	-0.00664	-0.000423	-0.00184	0.000964	-0.00593	-0.00973
	(0.50)	(-1.36)	(-0.94)	(-1.08)	(-0.05)	(-0.19)	(0.09)	(-0.48)	(-0.70)
Constant	-0.00154	-0.00350	-0.00350	0.00314	0.00648	0.0123*	0.0132*	0.0146*	0.0151
	(-0.19)	(-0.78)	(-1.57)	(0.78)	(1.34)	(1.93)	(1.79)	(1.81)	(1.62)
Observations	1408	1408	1408	1408	1408	1408	1408	1408	1408
R^2	0.008	0.011	0.007	0.013	0.010	0.004	0.003	0.003	0.003
Adjusted R^2	0.003	0.006	0.002	0.008	0.005	-0.001	-0.002	-0.002	-0.002

Supplementary Internet Appendix to

Information Management and the Gun-Jumping Rules

Intended for online publication

TABLE IA.1. Effect of *NewsRatio* on Abnormal Returns: Triple Interaction
Non-Shelf Sample, Using 90 Days

This table reports the coefficient estimates from OLS regressions, restricting attention to non-shelf issuances, defined as issuances that occurred within 90 days of the filing date. The dependent variables are cumulative abnormal returns estimated using a 3-factor model around the issuance date, which is normalized to 0. Accordingly, columns (1) and (2) present results where the dependent variable represents cumulative abnormal return of firm i around issuance j in the pre-issuance period and columns (3) through (9) present results where the dependent variable represents cumulative abnormal return of firm i around issuance j in the post-issuance period. $\overline{NewsRatio}$ represents $\frac{(1+\overline{News})}{(1+\overline{Releases})}$, where $\overline{News}$ ($\overline{Releases}$) represents the mean number of news articles about (press releases by) firm i in the 50-day period leading up to the date of issuance j. *WSKI* is a dummy variable equal to 1 if firm i was a WKSI at the time of issuance j. *After* is a dummy variable equal to 1 if issuance j by firm i occurred after the SOR. $\overline{NewsRatio}$ *On WKSI After* represents the sum of $\overline{NewsRatio} \times WSKI \times After + \overline{NewsRatio} + \overline{NewsRatio} \times WKSI + \overline{NewsRatio} \times After$, and *p-value* represents the p-value of an F-test under the null hypothesis that this sum is equal to zero. Standard errors are clustered by day. t-statistics are presented in parentheses. The symbols *, **, and *** denote significance at the 10%, 5%, and 1% level, respectively.

	(1) [-30, -1]	(2) [-10, -1]	(3) [0, 1]	(4) [0, 5]	(5) [0, 10]	(6) [0, 20]	(7) [0, 30]	(8) [0, 40]	(9) [0, 50]
$\overline{NewsRatio}$ × WSKI × After	0.179	0.0915	-0.0925***	-0.206***	-0.191***	-0.159*	-0.255**	-0.268**	-0.200*
	(1.23)	(0.99)	(-2.72)	(-3.94)	(-2.76)	(-1.78)	(-2.25)	(-2.45)	(-1.80)
$\overline{NewsRatio}$	0.113	0.124*	-0.00213	-0.0770**	-0.101**	-0.101*	-0.127**	-0.125*	-0.0968
	(1.01)	(1.70)	(-0.09)	(-1.99)	(-2.38)	(-1.84)	(-2.20)	(-1.87)	(-1.27)
WKSI	0.160	0.0942	0.0134	-0.0423	-0.0474	-0.0157	-0.0820	-0.115	-0.0771
	(1.27)	(1.14)	(0.53)	(-0.93)	(-0.90)	(-0.20)	(-0.82)	(-1.44)	(-0.82)
After	0.157	0.140*	-0.105***	-0.210***	-0.210***	-0.212***	-0.240***	-0.178*	-0.0933
	(1.21)	(1.70)	(-3.29)	(-4.49)	(-3.38)	(-3.05)	(-3.03)	(-1.76)	(-0.96)
$\overline{NewsRatio}$ × WKSI	-0.129	-0.0934	-0.0151	0.0401	0.0445	0.0173	0.0802	0.124	0.0827
	(-1.02)	(-1.13)	(-0.63)	(0.91)	(0.87)	(0.22)	(0.82)	(1.65)	(0.92)
$\overline{NewsRatio}$ × After	-0.142	-0.145*	0.101***	0.203***	0.207***	0.209***	0.242***	0.180*	0.0919
	(-1.11)	(-1.77)	(3.26)	(4.54)	(3.51)	(3.14)	(3.22)	(1.86)	(0.99)
WKSI × After	-0.203	-0.0917	0.0914**	0.201***	0.187***	0.154*	0.249**	0.254**	0.199*
	(-1.38)	(-0.99)	(2.57)	(3.69)	(2.59)	(1.66)	(2.14)	(2.22)	(1.71)
Constant	-0.124	-0.130*	-0.00186	0.0796**	0.107**	0.112**	0.138**	0.134*	0.108
	(-1.10)	(-1.79)	(-0.08)	(2.00)	(2.46)	(1.99)	(2.28)	(1.91)	(1.36)
Observations	775	775	775	775	775	775	775	775	775
R^2	0.011	0.013	0.039	0.039	0.021	0.014	0.014	0.012	0.011
Adjusted R^2	0.002	0.004	0.030	0.030	0.012	0.005	0.005	0.002	0.002
$\overline{NewsRatio}$ on WKSI After	0.0218	-0.0232	-0.00920	-0.0400	-0.0403	-0.0338	-0.0597	-0.0895	-0.122
p-value	0.569	0.174	0.435	0.0258	0.0645	0.0965	0.0329	0.0142	0.00104

TABLE IA.2. Effect of *NewsRatio* on Abnormal Returns: Triple Interaction
Shelf Sample, Using 90 Days

This table reports the coefficient estimates from OLS regressions, restricting attention to shelf issuances, defined as issuances that occurred more than 90 days after the filing date. The dependent variables are cumulative abnormal returns estimated using a 3-factor model around the issuance date, which is normalized to 0. Accordingly, columns (1) and (2) present results where the dependent variable represents cumulative abnormal return of firm i around issuance j in the pre-issuance period and columns (3) through (9) present results where the dependent variable represents cumulative abnormal return of firm i around issuance j in the post-issuance period. $\overline{NewsRatio}$ represents $\frac{(1+\overline{News})}{(1+\overline{Releases})}$, where $\overline{News}$ ($\overline{Releases}$) represents the mean number of news articles about (press releases by) firm i in the 50-day period leading up to the date of issuance j. *WSKI* is a dummy variable equal to 1 if firm i was a WKSI at the time of issuance j. *After* is a dummy variable equal to 1 if issuance j by firm i occurred after the SOR. $\overline{NewsRatio}$ *On WKSI After* represents the sum of $\overline{NewsRatio} \times WSKI \times After + \overline{NewsRatio} + \overline{NewsRatio} \times WKSI + \overline{NewsRatio} \times After$, and *p-value* represents the p-value of an F-test under the null hypothesis that this sum is equal to zero. Standard errors are clustered by day. t-statistics are presented in parentheses. The symbols *, **, and *** denote significance at the 10%, 5%, and 1% level, respectively.

	(1) [-30, -1]	(2) [-10, -1]	(3) [0, 1]	(4) [0, 5]	(5) [0, 10]	(6) [0, 20]	(7) [0, 30]	(8) [0, 40]	(9) [0, 50]
$\overline{NewsRatio}$ × WSKI × After	0.0193	-0.0842	-0.0197	-0.0280	-0.0228	0.0114	-0.00341	-0.00134	-0.0358
	(0.11)	(-1.04)	(-0.52)	(-0.52)	(-0.32)	(0.13)	(-0.03)	(-0.01)	(-0.22)
$\overline{NewsRatio}$	0.163	0.00799	-0.0103	-0.0338	-0.00213	-0.0296	-0.0946*	-0.00490	-0.0377
	(1.20)	(0.16)	(-0.42)	(-1.02)	(-0.05)	(-0.86)	(-1.91)	(-0.06)	(-0.44)
WKSI	0.163	-0.00560	0.00647	-0.0310	0.0173	-0.0279	-0.0855	-0.0296	-0.0516
	(1.16)	(-0.10)	(0.22)	(-0.77)	(0.37)	(-0.60)	(-1.35)	(-0.31)	(-0.52)
After	0.0674	-0.0366	-0.0398	-0.0543	-0.0482	-0.0320	-0.0611	0.000887	-0.0496
	(0.41)	(-0.47)	(-1.04)	(-0.99)	(-0.69)	(-0.39)	(-0.56)	(0.01)	(-0.31)
$\overline{NewsRatio}$ × WKSI	-0.157	0.0175	-0.00475	0.0226	-0.0230	0.0131	0.0638	0.00672	0.0253
	(-1.12)	(0.31)	(-0.18)	(0.62)	(-0.54)	(0.32)	(1.12)	(0.07)	(0.27)
$\overline{NewsRatio}$ × After	-0.0661	0.0405	0.0315	0.0381	0.0388	0.0193	0.0440	-0.0194	0.0213
	(-0.40)	(0.53)	(0.88)	(0.74)	(0.58)	(0.25)	(0.42)	(-0.14)	(0.14)
WKSI × After	-0.0119	0.0864	0.0194	0.0366	0.0291	0.00565	0.0198	0.0177	0.0673
	(-0.07)	(1.05)	(0.48)	(0.63)	(0.38)	(0.06)	(0.17)	(0.12)	(0.39)
Constant	-0.137	-0.0149	0.00555	0.0340	0.000953	0.0402	0.113**	0.0247	0.0564
	(-0.99)	(-0.29)	(0.20)	(0.93)	(0.02)	(1.01)	(2.03)	(0.27)	(0.61)
Observations	633	633	633	633	633	633	633	633	633
R^2	0.011	0.015	0.012	0.013	0.006	0.007	0.012	0.009	0.008
Adjusted R^2	0.000	0.004	0.001	0.002	-0.005	-0.005	0.001	-0.003	-0.003
$\overline{NewsRatio}$ on WKSI After	-0.0410	-0.0182	-0.00323	-0.00111	-0.00914	0.0141	0.00983	-0.0189	-0.0270
p-value	0.0324	0.0342	0.714	0.938	0.680	0.639	0.792	0.578	0.557

TABLE IA.3. Effect of *NewsRatio* on Abnormal Returns: Triple Interaction
Non-Shelf Sample – "Statutory" Quiet Period

This table reports the coefficient estimates from OLS regressions, restricting attention to non-shelf issuances, defined as issuances that occurred within 120 days of the filing date. The dependent variables are cumulative abnormal returns estimated using a 3-factor model around the issuance date, which is normalized to 0. Accordingly, columns (1) and (2) present results where the dependent variable represents cumulative abnormal return of firm i around issuance j in the pre-issuance period and columns (3) through (9) present results where the dependent variable represents cumulative abnormal return of firm i around issuance j in the post-issuance period. $\overline{NewsRatio}$ represents $\frac{(1+\overline{News})}{(1+\overline{Releases})}$, where $\overline{News}$ ($\overline{Releases}$) represents the mean number of news articles about (press releases by) firm i in the 30-day period leading up to the filing date associated with issuance j, plus the earlier of 20 days after the filing date and the date of issuance j. *WSKI* is a dummy variable equal to 1 if firm i was a WKSI at the time of issuance j. *After* is a dummy variable equal to 1 if issuance j by firm i occurred after the SOR. $\overline{NewsRatio}$ *On WKSI After* represents the sum of $\overline{NewsRatio} \times WSKI \times After + \overline{NewsRatio} + \overline{NewsRatio} \times WKSI + \overline{NewsRatio} \times After$, and *p-value* represents the p-value of an F-test under the null hypothesis that this sum is equal to zero. Standard errors are clustered by day. t-statistics are presented in parentheses. The symbols *, **, and *** denote significance at the 10%, 5%, and 1% level, respectively.

	(1) [-30, -1]	(2) [-10, -1]	(3) [0, 1]	(4) [0, 5]	(5) [0, 10]	(6) [0, 20]	(7) [0, 30]	(8) [0, 40]	(9) [0, 50]
$\overline{NewsRatio} \times$ WSKI $\times$ After	0.0902	0.0401	-0.0609**	-0.161***	-0.142**	-0.153**	-0.214**	-0.208**	-0.195*
	(0.73)	(0.53)	(-2.05)	(-3.34)	(-2.29)	(-1.98)	(-2.42)	(-2.11)	(-1.85)
$\overline{NewsRatio}$	0.0766	0.0878	-0.000503	-0.0619*	-0.0810**	-0.0913*	-0.113**	-0.121**	-0.0978
	(0.84)	(1.48)	(-0.02)	(-1.86)	(-2.05)	(-1.76)	(-2.13)	(-2.03)	(-1.43)
WKSI	0.0843	0.0666	0.000926	-0.0561	-0.0577	-0.0374	-0.0917	-0.118*	-0.0836
	(0.86)	(1.04)	(0.04)	(-1.50)	(-1.28)	(-0.57)	(-1.28)	(-1.66)	(-1.05)
After	0.0876	0.0694	-0.0678**	-0.151***	-0.144**	-0.179***	-0.195**	-0.143	-0.121
	(0.75)	(0.96)	(-2.41)	(-3.27)	(-2.41)	(-2.59)	(-2.54)	(-1.54)	(-1.20)
$\overline{NewsRatio} \times$ WKSI	-0.0646	-0.0677	-0.00348	0.0513	0.0518	0.0354	0.0815	0.116*	0.0804
	(-0.68)	(-1.07)	(-0.17)	(1.44)	(1.20)	(0.56)	(1.20)	(1.74)	(1.08)
$\overline{NewsRatio} \times$ After	-0.0793	-0.0779	0.0631**	0.142***	0.142**	0.174***	0.193***	0.135	0.109
	(-0.69)	(-1.10)	(2.36)	(3.22)	(2.51)	(2.65)	(2.64)	(1.54)	(1.14)
WKSI $\times$ After	-0.103	-0.0350	0.0610*	0.161***	0.140**	0.149*	0.216**	0.208**	0.205*
	(-0.81)	(-0.45)	(1.93)	(3.16)	(2.11)	(1.82)	(2.32)	(1.99)	(1.83)
Constant	-0.0793	-0.0927	-0.00299	0.0660*	0.0887**	0.105*	0.128**	0.137**	0.114
	(-0.86)	(-1.55)	(-0.14)	(1.91)	(2.18)	(1.94)	(2.29)	(2.18)	(1.59)
Observations	865	865	865	865	865	865	865	865	865
R^2	0.005	0.010	0.018	0.022	0.013	0.013	0.012	0.010	0.010
Adjusted R^2	-0.004	0.002	0.010	0.014	0.005	0.005	0.004	0.002	0.002
$\overline{NewsRatio}$ on WKSI After	0.0229	-0.0177	-0.00179	-0.0298	-0.0300	-0.0350	-0.0520	-0.0778	-0.104
p-value	0.543	0.262	0.881	0.0687	0.135	0.0448	0.0390	0.0248	0.00390

TABLE IA.4. Effect of *NewsRatio* on Abnormal Returns: Triple Interaction
Shelf Sample – "Statutory" Quiet Period

This table reports the coefficient estimates from OLS regressions, restricting attention to shelf issuances, defined as issuances that occurred more than 120 days after the filing date. The dependent variables are cumulative abnormal returns estimated using a 3-factor model around the issuance date, which is normalized to 0. Accordingly, columns (1) and (2) present results where the dependent variable represents cumulative abnormal return of firm i around issuance j in the pre-issuance period and columns (3) through (9) present results where the dependent variable represents cumulative abnormal return of firm i around issuance j in the post-issuance period. $\overline{NewsRatio}$ represents $\frac{(1+\overline{News})}{(1+\overline{Releases})}$, where $\overline{News}$ ($\overline{Releases}$) represents the mean number of news articles about (press releases by) firm i in the 30-day period leading up to the filing date associated with issuance j, plus the earlier of 20 days after the filing date and the date of issuance j. *WSKI* is a dummy variable equal to 1 if firm i was a WKSI at the time of issuance j. *After* is a dummy variable equal to 1 if issuance j by firm i occurred after the SOR. $\overline{NewsRatio}$ *On WKSI After* represents the sum of $\overline{NewsRatio} \times WSKI \times After + \overline{NewsRatio} + \overline{NewsRatio} \times WKSI + \overline{NewsRatio} \times After$, and *p-value* represents the p-value of an F-test under the null hypothesis that this sum is equal to zero. Standard errors are clustered by day. t-statistics are presented in parentheses. The symbols *, **, and *** denote significance at the 10%, 5%, and 1% level, respectively.

	(1) [-30, -1]	(2) [-10, -1]	(3) [0, 1]	(4) [0, 5]	(5) [0, 10]	(6) [0, 20]	(7) [0, 30]	(8) [0, 40]	(9) [0, 50]
$\overline{NewsRatio} \times$ WSKI $\times$ After	-0.119	-0.0579	-0.0306	0.0524	0.116	0.226**	0.267**	0.244	0.226
	(-0.67)	(-0.72)	(-0.62)	(0.67)	(1.18)	(2.19)	(2.12)	(1.63)	(1.28)
$\overline{NewsRatio}$	-0.00978	-0.0587	-0.0234	-0.0278	-0.0241	-0.0110	-0.0320	0.0324	-0.0767
	(-0.09)	(-0.98)	(-0.81)	(-0.49)	(-0.41)	(-0.17)	(-0.41)	(0.29)	(-0.65)
WKSI	-0.150	-0.0675	-0.0306	0.0161	0.0187	0.0396	-0.0109	0.0509	-0.0384
	(-0.92)	(-0.99)	(-0.72)	(0.26)	(0.28)	(0.52)	(-0.12)	(0.43)	(-0.29)
After	0.0848	-0.00694	-0.0340	-0.0182	0.0433	0.107	0.164	0.196	0.134
	(0.62)	(-0.08)	(-0.78)	(-0.23)	(0.44)	(1.06)	(1.29)	(1.31)	(0.75)
$\overline{NewsRatio} \times$ WKSI	0.159	0.0838	0.0321	-0.0191	-0.0188	-0.0456	0.00108	-0.0543	0.0250
	(1.02)	(1.34)	(0.82)	(-0.32)	(-0.30)	(-0.62)	(0.01)	(-0.47)	(0.20)
$\overline{NewsRatio} \times$ After	-0.0735	0.0193	0.0262	0.00497	-0.0528	-0.116	-0.167	-0.192	-0.143
	(-0.57)	(0.25)	(0.65)	(0.07)	(-0.57)	(-1.21)	(-1.41)	(-1.34)	(-0.86)
WKSI $\times$ After	0.120	0.0495	0.0299	-0.0508	-0.114	-0.218**	-0.272**	-0.259*	-0.220
	(0.63)	(0.57)	(0.57)	(-0.61)	(-1.10)	(-1.98)	(-2.01)	(-1.65)	(-1.16)
Constant	0.0289	0.0496	0.0176	0.0242	0.0182	0.0153	0.0416	-0.0286	0.0853
	(0.26)	(0.77)	(0.54)	(0.40)	(0.29)	(0.22)	(0.50)	(-0.25)	(0.69)
Observations	543	543	543	543	543	543	543	543	543
R^2	0.014	0.016	0.010	0.018	0.015	0.030	0.030	0.011	0.012
Adjusted R^2	0.001	0.003	-0.003	0.005	0.002	0.018	0.018	-0.002	-0.001
$\overline{NewsRatio}$ on WKSI After	-0.0430	-0.0135	0.00427	0.0104	0.0198	0.0539	0.0690	0.0304	0.0312
p-value	0.223	0.230	0.696	0.553	0.311	0.0291	0.00475	0.312	0.450

TABLE IA.5. Effect of *NewsRatio* on Abnormal Returns: Triple Interaction
Non-Shelf Sample – 1 Factor Model

This table reports the coefficient estimates from OLS regressions, restricting attention to non-shelf issuances, defined as issuances that occurred within 120 days of the filing date. The dependent variables are cumulative abnormal returns estimated using a 1-factor model around the issuance date, which is normalized to 0. Accordingly, columns (1) and (2) present results where the dependent variable represents cumulative abnormal return of firm i around issuance j in the pre-issuance period and columns (3) through (9) present results where the dependent variable represents cumulative abnormal return of firm i around issuance j in the post-issuance period. $\overline{NewsRatio}$ represents $\frac{(1+\overline{News})}{(1+\overline{Releases})}$, where $\overline{News}$ ($\overline{Releases}$) represents the mean number of news articles about (press releases by) firm i in the 50-day period leading up to the date of issuance j. *WSKI* is a dummy variable equal to 1 if firm i was a WKSI at the time of issuance j. *After* is a dummy variable equal to 1 if issuance j by firm i occurred after the SOR. $\overline{NewsRatio}$ *On WKSI After* represents the sum of $\overline{NewsRatio} \times WSKI \times After + \overline{NewsRatio} + \overline{NewsRatio} \times WKSI + \overline{NewsRatio} \times After$, and *p-value* represents the p-value of an F-test under the null hypothesis that this sum is equal to zero. Standard errors are clustered by day. t-statistics are presented in parentheses. The symbols *, **, and *** denote significance at the 10%, 5%, and 1% level, respectively.

	(1) [-30, -1]	(2) [-10, -1]	(3) [0, 1]	(4) [0, 5]	(5) [0, 10]	(6) [0, 20]	(7) [0, 30]	(8) [0, 40]	(9) [0, 50]
$\overline{NewsRatio}$ × WSKI × After	0.259*	0.0903	-0.0919***	-0.184***	-0.181**	-0.172**	-0.295***	-0.388***	-0.349***
	(1.75)	(1.37)	(-2.90)	(-3.62)	(-2.55)	(-2.11)	(-3.21)	(-3.90)	(-3.52)
$\overline{NewsRatio}$	0.229*	0.115***	0.00586	-0.0526	-0.0768*	-0.107**	-0.174***	-0.196***	-0.204***
	(1.84)	(2.63)	(0.33)	(-1.55)	(-1.67)	(-2.28)	(-3.70)	(-3.25)	(-3.25)
WKSI	0.251*	0.0931*	0.0136	-0.0428	-0.0475	-0.0685	-0.160**	-0.219***	-0.198***
	(1.93)	(1.71)	(0.63)	(-1.04)	(-0.87)	(-0.99)	(-2.23)	(-3.11)	(-2.63)
After	0.231*	0.114**	-0.0915***	-0.161***	-0.180***	-0.196***	-0.276***	-0.293***	-0.249***
	(1.66)	(2.06)	(-3.20)	(-3.71)	(-2.80)	(-3.04)	(-3.76)	(-3.18)	(-2.76)
$\overline{NewsRatio}$ × WKSI	-0.229*	-0.0911*	-0.0153	0.0385	0.0408	0.0635	0.146**	0.213***	0.194***
	(-1.77)	(-1.67)	(-0.74)	(0.96)	(0.76)	(0.94)	(2.11)	(3.25)	(2.75)
$\overline{NewsRatio}$ × After	-0.231*	-0.122**	0.0869***	0.151***	0.174***	0.188***	0.265***	0.273***	0.225***
	(-1.68)	(-2.24)	(3.13)	(3.62)	(2.80)	(3.06)	(3.80)	(3.12)	(2.64)
WKSI × After	-0.273*	-0.0886	0.0926***	0.183***	0.179**	0.165*	0.295***	0.386***	0.353***
	(-1.82)	(-1.32)	(2.82)	(3.48)	(2.43)	(1.95)	(3.10)	(3.71)	(3.36)
Constant	-0.225*	-0.121***	-0.00977	0.0571*	0.0869*	0.124***	0.195***	0.220***	0.229***
	(-1.81)	(-2.76)	(-0.54)	(1.65)	(1.87)	(2.59)	(3.93)	(3.44)	(3.45)
Observations	865	865	865	865	865	865	865	865	865
R^2	0.017	0.017	0.036	0.031	0.021	0.016	0.023	0.027	0.026
Adjusted R^2	0.009	0.009	0.028	0.023	0.013	0.008	0.015	0.019	0.018
$\overline{NewsRatio}$ on WKSI After	0.0280	-0.00787	-0.0144	-0.0472	-0.0426	-0.0275	-0.0569	-0.0978	-0.134
p-value	0.484	0.662	0.175	0.0161	0.0387	0.180	0.0508	0.0108	0.000381

TABLE IA.6. Effect of *NewsRatio* on Abnormal Returns: Triple Interaction
Non-Shelf Sample – 4 Factor Model

This table reports the coefficient estimates from OLS regressions, restricting attention to non-shelf issuances, defined as issuances that occurred within 120 days of the filing date. The dependent variables are cumulative abnormal returns estimated using a 4-factor model around the issuance date, which is normalized to 0. Accordingly, columns (1) and (2) present results where the dependent variable represents cumulative abnormal return of firm i around issuance j in the pre-issuance period and columns (3) through (9) present results where the dependent variable represents cumulative abnormal return of firm i around issuance j in the post-issuance period. $\overline{NewsRatio}$ represents $\frac{(1+\overline{News})}{(1+\overline{Releases})}$, where $\overline{News}$ ($\overline{Releases}$) represents the mean number of news articles about (press releases by) firm i in the 50-day period leading up to the date of issuance j. *WSKI* is a dummy variable equal to 1 if firm i was a WKSI at the time of issuance j. *After* is a dummy variable equal to 1 if issuance j by firm i occurred after the SOR. $\overline{NewsRatio}$ *On WKSI After* represents the sum of $\overline{NewsRatio} \times WSKI \times After + \overline{NewsRatio} + \overline{NewsRatio} \times WKSI + \overline{NewsRatio} \times After$, and *p-value* represents the p-value of an F-test under the null hypothesis that this sum is equal to zero. Standard errors are clustered by day. t-statistics are presented in parentheses. The symbols *, **, and *** denote significance at the 10%, 5%, and 1% level, respectively.

	(1) [-30, -1]	(2) [-10, -1]	(3) [0, 1]	(4) [0, 5]	(5) [0, 10]	(6) [0, 20]	(7) [0, 30]	(8) [0, 40]	(9) [0, 50]
$\overline{NewsRatio}$ × WSKI × After	0.301**	0.0804	-0.0707**	-0.181***	-0.173**	-0.185***	-0.279***	-0.314***	-0.244**
	(2.02)	(1.23)	(-2.27)	(-3.59)	(-2.45)	(-2.60)	(-3.38)	(-3.15)	(-2.34)
$\overline{NewsRatio}$	0.218*	0.0993**	0.0110	-0.0427	-0.0680	-0.107**	-0.162***	-0.181***	-0.186***
	(1.75)	(2.28)	(0.59)	(-1.21)	(-1.48)	(-2.46)	(-3.73)	(-3.37)	(-3.08)
WKSI	0.271**	0.0776	0.0227	-0.0306	-0.0432	-0.0653	-0.155**	-0.201***	-0.190**
	(2.07)	(1.51)	(1.07)	(-0.76)	(-0.83)	(-1.11)	(-2.44)	(-3.12)	(-2.42)
After	0.241*	0.100*	-0.0886***	-0.166***	-0.165**	-0.213***	-0.272***	-0.248***	-0.207**
	(1.73)	(1.75)	(-3.07)	(-3.80)	(-2.54)	(-3.50)	(-3.96)	(-2.74)	(-2.37)
$\overline{NewsRatio}$ × WKSI	-0.246*	-0.0775	-0.0252	0.0267	0.0378	0.0610	0.143**	0.199***	0.187**
	(-1.89)	(-1.51)	(-1.23)	(0.67)	(0.74)	(1.07)	(2.37)	(3.33)	(2.56)
$\overline{NewsRatio}$ × After	-0.233*	-0.109*	0.0829***	0.156***	0.161***	0.207***	0.268***	0.240***	0.196**
	(-1.69)	(-1.95)	(2.95)	(3.71)	(2.59)	(3.62)	(4.15)	(2.79)	(2.39)
WKSI × After	-0.318**	-0.0754	0.0728**	0.181***	0.172**	0.184**	0.284***	0.311***	0.250**
	(-2.10)	(-1.14)	(2.24)	(3.47)	(2.33)	(2.44)	(3.27)	(2.97)	(2.26)
Constant	-0.223*	-0.104**	-0.0145	0.0458	0.0746	0.120***	0.176***	0.197***	0.203***
	(-1.78)	(-2.38)	(-0.76)	(1.28)	(1.60)	(2.66)	(3.81)	(3.44)	(3.15)
Observations	865	865	865	865	865	865	865	865	865
R^2	0.016	0.013	0.035	0.031	0.017	0.014	0.016	0.014	0.009
Adjusted R^2	0.008	0.005	0.027	0.023	0.009	0.006	0.008	0.006	0.001
$\overline{NewsRatio}$ on WKSI After	0.0406	-0.00713	-0.00202	-0.0406	-0.0424	-0.0237	-0.0297	-0.0555	-0.0463
p-value	0.355	0.705	0.846	0.0586	0.107	0.226	0.286	0.177	0.334

TABLE IA.7. Effect of *NewsRatio* on Abnormal Returns: Triple Interaction
Shelf Sample – 1 Factor Model

This table reports the coefficient estimates from OLS regressions, restricting attention to shelf issuances, defined as issuances that occurred more than 120 days after the filing date. The dependent variables are cumulative abnormal returns estimated using a 1-factor model around the issuance date, which is normalized to 0. Accordingly, columns (1) and (2) present results where the dependent variable represents cumulative abnormal return of firm i around issuance j in the pre-issuance period and columns (3) through (9) present results where the dependent variable represents cumulative abnormal return of firm i around issuance j in the post-issuance period. $\overline{NewsRatio}$ represents $\frac{(1+\overline{News})}{(1+\overline{Releases})}$, where $\overline{News}$ ($\overline{Releases}$) represents the mean number of news articles about (press releases by) firm i in the 50-day period leading up to the date of issuance j. *WSKI* is a dummy variable equal to 1 if firm i was a WKSI at the time of issuance j. *After* is a dummy variable equal to 1 if issuance j by firm i occurred after the SOR. $\overline{NewsRatio}$ *On WKSI After* represents the sum of $\overline{NewsRatio} \times WSKI \times After + \overline{NewsRatio} + \overline{NewsRatio} \times WKSI + \overline{NewsRatio} \times After$, and *p-value* represents the p-value of an F-test under the null hypothesis that this sum is equal to zero. Standard errors are clustered by day. t-statistics are presented in parentheses. The symbols *, **, and *** denote significance at the 10%, 5%, and 1% level, respectively.

	(1) [-30, -1]	(2) [-10, -1]	(3) [0, 1]	(4) [0, 5]	(5) [0, 10]	(6) [0, 20]	(7) [0, 30]	(8) [0, 40]	(9) [0, 50]
$\overline{NewsRatio} \times$ WSKI $\times$ After	-0.176	-0.161*	-0.0244	-0.0786	-0.0327	0.0619	0.0428	0.204	0.146
	(-1.22)	(-1.83)	(-0.59)	(-1.30)	(-0.37)	(0.71)	(0.33)	(1.36)	(0.86)
$\overline{NewsRatio}$	0.00337	-0.0558	-0.0304	-0.0513	0.0172	0.0154	-0.0235	0.164**	0.114
	(0.04)	(-1.10)	(-1.14)	(-1.38)	(0.34)	(0.34)	(-0.41)	(2.11)	(1.60)
WKSI	0.00245	-0.0610	-0.00949	-0.0338	0.0506	0.0237	-0.00603	0.163*	0.110
	(0.02)	(-0.94)	(-0.28)	(-0.75)	(0.87)	(0.43)	(-0.08)	(1.79)	(1.19)
After	-0.130	-0.113	-0.0491	-0.113*	-0.0674	0.0148	-0.0147	0.200	0.140
	(-0.96)	(-1.37)	(-1.16)	(-1.80)	(-0.76)	(0.17)	(-0.11)	(1.35)	(0.84)
$\overline{NewsRatio} \times$ WKSI	0.0114	0.0755	0.0120	0.0316	-0.0472	-0.0305	-0.00410	-0.168**	-0.124
	(0.11)	(1.22)	(0.41)	(0.78)	(-0.86)	(-0.60)	(-0.06)	(-1.99)	(-1.50)
$\overline{NewsRatio} \times$ After	0.131	0.126	0.0411	0.0996*	0.0595	-0.0302	-0.00441	-0.215	-0.169
	(0.99)	(1.57)	(1.07)	(1.70)	(0.70)	(-0.37)	(-0.04)	(-1.50)	(-1.07)
WKSI $\times$ After	0.180	0.153*	0.0235	0.0817	0.0341	-0.0457	-0.0304	-0.198	-0.117
	(1.19)	(1.69)	(0.52)	(1.25)	(0.37)	(-0.49)	(-0.22)	(-1.27)	(-0.65)
Constant	0.0242	0.0494	0.0253	0.0476	-0.0244	-0.00901	0.0363	-0.156*	-0.104
	(0.25)	(0.93)	(0.81)	(1.14)	(-0.45)	(-0.18)	(0.57)	(-1.87)	(-1.29)
Observations	543	543	543	543	543	543	543	543	543
R^2	0.005	0.017	0.012	0.015	0.007	0.007	0.005	0.014	0.013
Adjusted R^2	-0.008	0.004	-0.000	0.002	-0.006	-0.006	-0.008	0.002	0.000
$\overline{NewsRatio}$ on WKSI After	-0.0294	-0.0154	-0.00181	0.00125	-0.00318	0.0166	0.0108	-0.0153	-0.0328
p-value	0.280	0.271	0.855	0.925	0.899	0.595	0.771	0.651	0.462

TABLE IA.8. Effect of *NewsRatio* on Abnormal Returns: Triple Interaction
Shelf Sample – 4 Factor Model

This table reports the coefficient estimates from OLS regressions, restricting attention to shelf issuances, defined as issuances that occurred more than 120 days after the filing date. The dependent variables are cumulative abnormal returns estimated using a 1-factor model around the issuance date, which is normalized to 0. Accordingly, columns (1) and (2) present results where the dependent variable represents cumulative abnormal return of firm i around issuance j in the pre-issuance period and columns (3) through (9) present results where the dependent variable represents cumulative abnormal return of firm i around issuance j in the post-issuance period. $\overline{NewsRatio}$ represents $\frac{(1+\overline{News})}{(1+\overline{Releases})}$, where $\overline{News}$ ($\overline{Releases}$) represents the mean number of news articles about (press releases by) firm i in the 50-day period leading up to the date of issuance j. *WSKI* is a dummy variable equal to 1 if firm i was a WKSI at the time of issuance j. *After* is a dummy variable equal to 1 if issuance j by firm i occurred after the SOR. $\overline{NewsRatio}$ *On WKSI After* represents the sum of $\overline{NewsRatio} \times WSKI \times After + \overline{NewsRatio} + \overline{NewsRatio} \times WKSI + \overline{NewsRatio} \times After$, and *p-value* represents the p-value of an F-test under the null hypothesis that this sum is equal to zero. Standard errors are clustered by day. t-statistics are presented in parentheses. The symbols *, **, and *** denote significance at the 10%, 5%, and 1% level, respectively.

	(1) [-30, -1]	(2) [-10, -1]	(3) [0, 1]	(4) [0, 5]	(5) [0, 10]	(6) [0, 20]	(7) [0, 30]	(8) [0, 40]	(9) [0, 50]
$\overline{NewsRatio} \times$ WSKI $\times$ After	-0.141	-0.180**	-0.0187	-0.0616	0.0108	0.0811	0.128	0.287**	0.207
	(-0.94)	(-2.05)	(-0.46)	(-0.98)	(0.13)	(0.90)	(1.03)	(2.02)	(1.33)
$\overline{NewsRatio}$	0.0138	-0.0634	-0.0263	-0.0428	0.0263	0.0192	0.0000929	0.185**	0.125*
	(0.14)	(-1.16)	(-0.97)	(-1.12)	(0.54)	(0.43)	(0.00)	(2.06)	(1.70)
WKSI	0.0220	-0.0851	-0.00450	-0.0281	0.0586	0.0335	0.0291	0.193*	0.135
	(0.19)	(-1.27)	(-0.13)	(-0.60)	(1.03)	(0.60)	(0.37)	(1.91)	(1.44)
After	-0.0927	-0.121	-0.0460	-0.0953	-0.0296	0.0433	0.0657	0.279*	0.192
	(-0.67)	(-1.45)	(-1.09)	(-1.47)	(-0.36)	(0.48)	(0.54)	(1.96)	(1.26)
$\overline{NewsRatio} \times$ WKSI	-0.00423	0.101	0.00796	0.0234	-0.0588	-0.0429	-0.0413	-0.198**	-0.150*
	(-0.04)	(1.57)	(0.27)	(0.56)	(-1.12)	(-0.86)	(-0.58)	(-2.09)	(-1.79)
$\overline{NewsRatio} \times$ After	0.103	0.134	0.0391	0.0835	0.0218	-0.0518	-0.0721	-0.274**	-0.200
	(0.75)	(1.65)	(1.02)	(1.38)	(0.28)	(-0.61)	(-0.61)	(-1.99)	(-1.37)
WKSI $\times$ After	0.133	0.173*	0.0159	0.0651	-0.00722	-0.0680	-0.125	-0.298**	-0.195
	(0.86)	(1.91)	(0.36)	(0.96)	(-0.08)	(-0.71)	(-0.96)	(-2.02)	(-1.19)
Constant	0.00421	0.0531	0.0203	0.0390	-0.0326	-0.0152	0.0109	-0.183*	-0.119
	(0.04)	(0.93)	(0.63)	(0.91)	(-0.62)	(-0.30)	(0.15)	(-1.91)	(-1.43)
Observations	543	543	543	543	543	543	543	543	543
R^2	0.005	0.020	0.012	0.011	0.005	0.003	0.007	0.015	0.008
Adjusted R^2	-0.008	0.007	-0.001	-0.002	-0.008	-0.010	-0.006	0.002	-0.005
$\overline{NewsRatio}$ on WKSI After	-0.0283	-0.00893	0.00209	0.00247	0.0000414	0.00561	0.0149	0.00112	-0.0183
p-value	0.275	0.315	0.763	0.806	0.998	0.833	0.645	0.967	0.651

TABLE IA.9. Effect of Press Releases ($\overline{Releases}$) on Abnormal Returns: Triple Interaction
Non-Shelf Sample

This table reports the coefficient estimates from OLS regressions, restricting attention to non-shelf issuances, defined as issuances that occurred within 120 days of the filing date. The dependent variables are cumulative abnormal returns estimated using a 3-factor model around the issuance date, which is normalized to 0. Accordingly, columns (1) and (2) present results where the dependent variable represents cumulative abnormal return of firm i around issuance j in the pre-issuance period and columns (3) through (9) present results where the dependent variable represents cumulative abnormal return of firm i around issuance j in the post-issuance period. $\overline{Releases}$ represents the mean number of press releases by firm i in the 50-day period leading up to the date of issuance j. *WSKI* is a dummy variable equal to 1 if firm i was a WKSI at the time of issuance j. *After* is a dummy variable equal to 1 if issuance j by firm i occurred after the SOR. $\overline{Releases}$ *On WKSI After* represents the sum of $\overline{Releases} \times WSKI \times After + \overline{Releases} + \overline{Releases} \times WKSI + \overline{Releases} \times After$, and *p-value* represents the p-value of an F-test under the null hypothesis that this sum is equal to zero. Standard errors are clustered by day. t-statistics are presented in parentheses. The symbols *, **, and *** denote significance at the 10%, 5%, and 1% level, respectively.

	(1) [-30, -1]	(2) [-10, -1]	(3) [0, 1]	(4) [0, 5]	(5) [0, 10]	(6) [0, 20]	(7) [0, 30]	(8) [0, 40]	(9) [0, 50]
$\overline{NewsRatio}$ × WSKI × After	-0.323	-0.235**	0.0271	0.0840	0.0735	0.175	0.0896	0.112	-0.192
	(-1.35)	(-2.06)	(0.41)	(0.87)	(0.55)	(1.10)	(0.45)	(0.50)	(-0.81)
$\overline{Releases}$	-0.203	-0.116	0.0168	0.0549	0.116	0.115	0.144	0.113	-0.0298
	(-1.61)	(-1.59)	(0.50)	(0.88)	(1.64)	(1.15)	(1.25)	(0.87)	(-0.20)
WKSI	0.000682	-0.0150	-0.00262	0.00110	0.00205	-0.000290	-0.0173	-0.00213	-0.0172
	(0.03)	(-1.18)	(-0.47)	(0.11)	(0.17)	(-0.02)	(-0.86)	(-0.11)	(-0.73)
After	-0.0265	-0.0281**	0.000597	0.00257	0.00804	0.0188	0.0231	0.0143	-0.0191
	(-1.16)	(-2.18)	(0.08)	(0.21)	(0.54)	(1.02)	(1.07)	(0.58)	(-0.68)
$\overline{Releases}$ × WKSI	0.198	0.134	-0.00820	-0.0579	-0.102	-0.0753	-0.0180	-0.0400	0.0993
	(1.39)	(1.51)	(-0.21)	(-0.84)	(-1.24)	(-0.68)	(-0.13)	(-0.27)	(0.57)
$\overline{Releases}$ × After	0.338	0.186*	-0.0408	-0.0924	-0.0896	-0.206	-0.222	-0.202	0.0917
	(1.48)	(1.83)	(-0.66)	(-1.00)	(-0.71)	(-1.37)	(-1.24)	(-0.98)	(0.42)
WKSI × After	0.0199	0.0314*	-0.00255	-0.0116	-0.0105	-0.0216	-0.00383	-0.0129	0.0277
	(0.71)	(1.93)	(-0.28)	(-0.79)	(-0.58)	(-0.96)	(-0.14)	(-0.44)	(0.82)
Constant	0.0181	0.00769	-0.00512	-0.00217	-0.00470	0.00121	-0.000716	0.00364	0.0179
	(1.24)	(0.85)	(-1.32)	(-0.29)	(-0.52)	(0.09)	(-0.05)	(0.23)	(0.97)
Observations	865	865	865	865	865	865	865	865	865
R^2	0.007	0.013	0.006	0.010	0.006	0.005	0.007	0.004	0.003
Adjusted R^2	-0.001	0.005	-0.002	0.002	-0.002	-0.003	-0.001	-0.004	-0.005
$\overline{Releases}$ on WKSI After	0.00930	-0.0303	-0.00512	-0.0114	-0.00241	0.00809	-0.00701	-0.0172	-0.0309
p-value	0.683	0.000513	0.189	0.117	0.871	0.603	0.749	0.479	0.199

TABLE IA.10. Effect of Press Releases ($\overline{Releases}$) on Abnormal Returns: Triple Interaction
Shelf Sample

This table reports the coefficient estimates from OLS regressions, restricting attention to shelf issuances, defined as issuances that occurred more than 120 days after the filing date. The dependent variables are cumulative abnormal returns estimated using a 3-factor model around the issuance date, which is normalized to 0. Accordingly, columns (1) and (2) present results where the dependent variable represents cumulative abnormal return of firm i around issuance j in the pre-issuance period and columns (3) through (9) present results where the dependent variable represents cumulative abnormal return of firm i around issuance j in the post-issuance period. $\overline{Releases}$ represents the mean number of press releases by firm i in the 50-day period leading up to the date of issuance j. *WSKI* is a dummy variable equal to 1 if firm i was a WKSI at the time of issuance j. *After* is a dummy variable equal to 1 if issuance j by firm i occurred after the SOR. $\overline{Releases}$ *On WKSI After* represents the sum of $\overline{Releases} \times WSKI \times After + \overline{Releases} + \overline{Releases} \times WKSI + \overline{Releases} \times After$, and *p-value* represents the p-value of an F-test under the null hypothesis that this sum is equal to zero. Standard errors are clustered by day. t-statistics are presented in parentheses. The symbols *, **, and *** denote significance at the 10%, 5%, and 1% level, respectively.

	(1) [-30, -1]	(2) [-10, -1]	(3) [0, 1]	(4) [0, 5]	(5) [0, 10]	(6) [0, 20]	(7) [0, 30]	(8) [0, 40]	(9) [0, 50]
$\overline{NewsRatio}$ × WSKI × After	-0.193	-0.0874	-0.0607	0.0364	0.0126	0.00174	0.192	0.0193	-0.0128
	(-0.78)	(-0.55)	(-0.80)	(0.30)	(0.08)	(0.01)	(0.83)	(0.08)	(-0.05)
$\overline{Releases}$	0.0667	0.0842	-0.0262	0.0257	0.0421	-0.0744	0.0421	-0.150	-0.115
	(0.39)	(0.70)	(-0.42)	(0.27)	(0.33)	(-0.52)	(0.28)	(-0.90)	(-0.68)
WKSI	0.0284	0.0275	0.00528	-0.000856	0.00130	-0.0182	-0.00673	-0.0176	-0.0211
	(0.87)	(1.41)	(0.54)	(-0.06)	(0.08)	(-0.82)	(-0.27)	(-0.62)	(-0.69)
After	-0.0176	0.00316	-0.0163	-0.00810	-0.00686	-0.01000	0.0135	0.00141	-0.0157
	(-0.59)	(0.16)	(-1.48)	(-0.48)	(-0.32)	(-0.39)	(0.44)	(0.04)	(-0.37)
$\overline{Releases}$ × WKSI	-0.0891	-0.0786	-0.00544	-0.0328	-0.0339	0.0854	-0.0381	0.129	0.0877
	(-0.45)	(-0.61)	(-0.08)	(-0.33)	(-0.25)	(0.55)	(-0.22)	(0.71)	(0.47)
$\overline{Releases}$ × After	0.228	0.0793	0.0839	-0.0440	-0.0373	-0.00551	-0.183	-0.00246	0.0416
	(1.02)	(0.53)	(1.14)	(-0.38)	(-0.24)	(-0.03)	(-0.88)	(-0.01)	(0.16)
WKSI × After	0.0109	-0.000503	0.00448	0.00227	0.00856	0.0181	-0.0146	-0.0103	0.0137
	(0.27)	(-0.02)	(0.37)	(0.12)	(0.36)	(0.61)	(-0.41)	(-0.26)	(0.29)
Constant	0.0119	-0.0198	-0.00397	-0.00719	-0.0110	0.0117	0.00418	0.0204	0.0178
	(0.52)	(-1.23)	(-0.43)	(-0.54)	(-0.70)	(0.61)	(0.20)	(0.80)	(0.67)
Observations	543	543	543	543	543	543	543	543	543
R^2	0.005	0.016	0.013	0.010	0.005	0.004	0.003	0.004	0.002
Adjusted R^2	-0.008	0.003	0.001	-0.003	-0.008	-0.009	-0.010	-0.009	-0.011
$\overline{Releases}$ on WKSI After	0.0127	-0.00248	-0.00843	-0.0147	-0.0164	0.00722	0.0126	-0.00420	0.00198
p-value	0.714	0.878	0.445	0.396	0.450	0.833	0.728	0.891	0.960

TABLE IA.11. Difference in Differences: *SurpriseNewsRatio* By WKSI Status, Before and After the SOR

This table reports the coefficient estimates from OLS regressions. The dependent variable is the *SurpriseNewsRatio* of firm *i*. Data are arranged in event time, where 0 is the date of issuance *j*. Each column reflects data from a different 25-day period in event time. *WSKI* is a dummy variable equal to 1 if firm *i* was a WKSI at the time of issuance *j*. *After* is a dummy variable equal to 1 if issuance *j* by firm *i* occurred after the SOR. t-statistics computed using heteroskedasticity-robust standard errors are presented in parentheses. The symbols *, **, and *** denote significance at the 10%, 5%, and 1% level, respectively.

	(1) [-100, -76]	(2) [-75, -51]	(3) [-50, -26]	(4) [-25, -1]	(5) [0, 24]
WKSI × After	-0.0269***	0.00993	-0.00285	0.0142*	0.0147
	(-3.42)	(1.42)	(-0.37)	(1.81)	(1.49)
WKSI	0.0247***	-0.000700	-0.00143	0.000813	-0.00663
	(4.13)	(-0.14)	(-0.26)	(0.15)	(-0.89)
After	0.00531	-0.00373	0.00901**	0.00518	-0.0173***
	(1.40)	(-1.11)	(2.21)	(1.27)	(-2.98)
Constant	-0.00348	-0.00339	0.000755	-0.000218	0.0188***
	(-1.33)	(-1.42)	(0.28)	(-0.08)	(4.30)
Observations	33604	33723	33963	34191	34244
R^2	0.001	0.000	0.000	0.001	0.000
Adjusted R^2	0.001	0.000	0.000	0.000	0.000

TABLE IA.12. Difference in Differences, WKSIs: Effect of *NewsRatio* on Abnormal Returns
Non-Shelf Sample

This table reports the coefficient estimates from OLS regressions, restricting attention to shelf issuances, defined as issuances that occurred more than 90 days after the filing date, by firms that were WKSIs at the time of the issuance. The dependent variables are cumulative abnormal returns estimated using a 3-factor model around the issuance date, which is normalized to 0. Accordingly, columns (1) and (2) present results where the dependent variable represents cumulative abnormal return of firm i around issuance j in the pre-issuance period and columns (3) through (9) present results where the dependent variable represents cumulative abnormal return of firm i around issuance j in the post-issuance period. $\overline{NewsRatio}$ represents $\frac{(1+\overline{News})}{(1+\overline{Releases})}$, where $\overline{News}$ ($\overline{Releases}$) represents the mean number of news articles about (press releases by) firm i in the 50-day period leading up to the date of issuance j. *After* is a dummy variable equal to 1 if issuance j by firm i occurred after the SOR. $\overline{NewsRatio}$ + $\overline{NewsRatio}$ $\times$ *After* represents the sum of $\overline{NewsRatio}$ and $\overline{NewsRatio}$ $\times$ *After* , and *p-value* represents the p-value of an F-test under the null hypothesis that this sum is equal to zero. Standard errors are clustered by day. t-statistics are presented in parentheses. The symbols *, **, and *** denote significance at the 10%, 5%, and 1% level, respectively.

	(1) [-30, -1]	(2) [-10, -1]	(3) [0, 1]	(4) [0, 5]	(5) [0, 10]	(6) [0, 20]	(7) [0, 30]	(8) [0, 40]	(9) [0, 50]
$\overline{NewsRatio}$ $\times$ After	-0.0559	-0.0514	0.0165	0.0196	0.0282	0.0445	0.0619	0.00160	0.00275
	(-1.00)	(-1.51)	(1.17)	(0.94)	(0.97)	(1.15)	(1.24)	(0.03)	(0.04)
$\overline{NewsRatio}$	0.0138	0.0323	-0.0194*	-0.0204	-0.0370*	-0.0303	-0.0520	-0.0201	-0.0298
	(0.26)	(0.98)	(-1.76)	(-1.36)	(-1.96)	(-1.26)	(-1.56)	(-0.61)	(-0.69)
After	0.0621	0.0575	-0.0262*	-0.0291	-0.0333	-0.0407	-0.0662	-0.00718	0.00115
	(0.94)	(1.58)	(-1.72)	(-1.31)	(-1.07)	(-0.98)	(-1.24)	(-0.14)	(0.02)
Constant	0.0217	-0.0262	0.0170	0.0128	0.0316	0.0281	0.0542	0.0210	0.0245
	(0.40)	(-0.77)	(1.46)	(0.79)	(1.54)	(1.05)	(1.50)	(0.59)	(0.54)
Observations	305	305	305	305	305	305	305	305	305
R^2	0.007	0.018	0.023	0.013	0.013	0.011	0.008	0.008	0.010
Adjusted R^2	-0.002	0.008	0.013	0.003	0.003	0.001	-0.002	-0.002	0.000
$\overline{NewsRatio}$ + $\overline{NewsRatio}$ $\times$ *After*	-0.0421	-0.0191	-0.00290	-0.000796	-0.00886	0.0141	0.00986	-0.0185	-0.0270
p-value	0.0319	0.0284	0.742	0.956	0.691	0.641	0.792	0.587	0.558

TABLE IA.13. Difference in Differences, Non-WKSIs: Effect of *NewsRatio* on Abnormal Returns
Shelf Sample

This table reports the coefficient estimates from OLS regressions, restricting attention to shelf issuances, defined as issuances that occurred more than 90 days after the filing date, by firms that were non-WKSIs at the time of the issuance. The dependent variables are cumulative abnormal returns estimated using a 3-factor model around the issuance date, which is normalized to 0. Accordingly, columns (1) and (2) present results where the dependent variable represents cumulative abnormal return of firm i around issuance j in the pre-issuance period and columns (3) through (9) present results where the dependent variable represents cumulative abnormal return of firm i around issuance j in the post-issuance period. $\overline{NewsRatio}$ represents $\frac{(1+\overline{News})}{(1+\overline{Releases})}$, where $\overline{News}$ ($\overline{Releases}$) represents the mean number of news articles about (press releases by) firm i in the 50-day period leading up to the date of issuance j. *After* is a dummy variable equal to 1 if issuance j by firm i occurred after the SOR. $\overline{NewsRatio}$ + $\overline{NewsRatio} \times After$ represents the sum of $\overline{NewsRatio}$ and $\overline{NewsRatio} \times After$, and *p-value* represents the p-value of an F-test under the null hypothesis that this sum is equal to zero. Standard errors are clustered by day. t-statistics are presented in parentheses. The symbols *, **, and *** denote significance at the 10%, 5%, and 1% level, respectively.

	(1) [-30, -1]	(2) [-10, -1]	(3) [0, 1]	(4) [0, 5]	(5) [0, 10]	(6) [0, 20]	(7) [0, 30]	(8) [0, 40]	(9) [0, 50]
$\overline{NewsRatio} \times$ After	0.0725	0.103	0.0440	0.0846	0.0487	-0.0255	-0.0177	-0.231*	-0.194
	(0.53)	(1.24)	(1.14)	(1.42)	(0.61)	(-0.31)	(-0.15)	(-1.72)	(-1.31)
$\overline{NewsRatio}$	0.0232	-0.0479	-0.0300	-0.0519	0.00834	0.0105	-0.0256	0.162**	0.125*
	(0.25)	(-0.93)	(-1.10)	(-1.34)	(0.16)	(0.22)	(-0.44)	(2.14)	(1.75)
After	-0.0608	-0.0898	-0.0512	-0.0978	-0.0582	0.0139	0.00923	0.232*	0.183
	(-0.44)	(-1.05)	(-1.21)	(-1.52)	(-0.69)	(0.16)	(0.08)	(1.67)	(1.18)
Constant	-0.00487	0.0377	0.0238	0.0482	-0.0151	-0.00664	0.0346	-0.160*	-0.121
	(-0.05)	(0.70)	(0.74)	(1.11)	(-0.27)	(-0.13)	(0.53)	(-1.94)	(-1.49)
Observations	238	238	238	238	238	238	238	238	238
R^2	0.004	0.011	0.008	0.013	0.005	0.003	0.002	0.015	0.007
Adjusted R^2	-0.009	-0.001	-0.005	-0.000	-0.008	-0.010	-0.011	0.002	-0.006
$\overline{NewsRatio}$ + $\overline{NewsRatio} \times After$	0.0957	0.0555	0.0140	0.0327	0.0571	-0.0151	-0.0433	-0.0688	-0.0694
p-value	0.339	0.400	0.607	0.472	0.344	0.827	0.673	0.535	0.594