We develop a model of seasoned equity offerings (SEOs) under limited investor attention. While existing models of equity issues assume that all investors pay immediate attention to SEO announcements, we assume that only a fraction of investors pay immediate attention, with the remaining fraction paying delayed attention. We develop three main predictions from our theoretical model not generated by existing equity issue models. First, in addition to an announcement effect, there will be a post-announcement stock return drift following SEOs. Second, the announcement effect of an SEO will be increasing and the post-announcement drift will be decreasing in the fraction of equity market investors paying immediate attention to the SEO announcement. Third, both the announcement effect and the post-SEO drift will have predictive power for the post-SEO operating performance of firms. We test the above three predictions of our theoretical model using the media coverage of firms prior to SEO announcements as our proxy for investor attention and find consistent evidence. Our baseline empirical results are robust to making use of abnormal investor attention (instead of the actual investor attention) received by firms, allowing us to rule out the possibility that our results are driven by the characteristics of certain firms that receive greater investor attention compared to others. We also use an instrumental variable analysis to show that the above empirical relationships are causal. Lastly, we demonstrate the robustness of our results using SEC EDGAR filing searches by investors as an alternative proxy for investor attention.

### Motivation

- The announcement effect of seasoned equity offerings (SEOs) has been extensively analyzed; both theoretically (e.g., Myers and Majluf (1984), Giammarino and Lewis (1988)) and empirically (e.g., Asquith and Mullins (1986), Masulis and Korwar (1986)).
- In models such as Myers and Majluf (1984), a crucial assumption is that all investors pay immediate attention to the SEO announcement.
- The objective of this paper is to relax the above assumption, assuming instead that only a fraction of investors in the equity market pay immediate attention to the SEO announcement, while the remaining fraction pay delayed attention to the SEO announcement.
- We then analyze the consequences of such partial investor attention paid to SEOs both theoretically and empirically in this paper.

### Summary of Findings

- We first theoretically analyze a two-type asymmetric information model, where a fraction of investors do not pay immediate attention to the equity issue and update their beliefs about the firm only in a delayed manner.
- We show both theoretically and empirically that
  - both the announcement effect and the post-announcement drift for SEOs are negative:
    - the announcement effect of an SEO will be positively related to the fraction of investors paying attention to the announcement,
    - there will be a post-announcement stock return drift that is negatively related to investor attention.
  - both the SEO announcement effect and the post-announcement stock return drift have predictive power for the future operating performance of the SEO firm.
- We conduct two identification tests and show that our results are causal.

### The Theoretical Model

#### Setup

We develop a two-type asymmetric information model to study how the attention of investors to SEO announcements affects the SEO announcement effect and post-announcement drift.

- Risk-neutral firm insiders have private information about their firm’s assets in place (IF at t).
- The firm has a positive NPV object and requiring to issue equity to raise the requisite I.
- A group of risk-neutral outside investors have cash / available and decide whether to participate in the firm’s equity issue.
- Only a fraction of investors pay immediate attention to the equity issue and update their beliefs about the firm, while the remaining fraction update their beliefs in a delayed manner.
- All investors who trade in the equity market are risk-averse.

There are four dates in the model: t = 0, 1, 2, 3.

### Propositions

1. When the NPV of the new project is high enough to compensate the current shareholders for the dilution effect of an equity issue in a type-I firm, a pooling equilibrium exists where both type-I and type-II firms issue new equity to implement the new project.
2. When the NPV of the new project is only high enough to compensate the current shareholders for the dilution effect of an equity issue in a type-I firm, but too low for a type-II firm, a separating equilibrium exists where only type-I firms issue new equity and implement the new project. (Propositions below focus on separating equilibrium.)
3. When the difference in the expected cash flow from assets in place between the two types of firms is sufficiently large, a firm’s stock price at t = 1 if it does not issue equity is expected to be higher than its price if it does issue.
4. When there are sufficiently many investors in the market invariant to the equity issue announcement on date t = 1, and the difference between the two types of firms’ expected cash flows from assets in place is sufficiently large, a firm’s stock price at t = 1 if it does not issue equity is expected to be higher than its price if it does issue. The announcement effect of seasoned equity offerings (SEOs) is that all investors pay immediate attention.

### Data

- SEO data: the Securities Data Company (SDC)/Platinum Global New Issues database
- All US SEOs from 2000 to 2018, offerings of common shares
- We compute our model using the subsequent four fiscal quarters after SEOs

### Robustness Check: Alternative Investor Attention Measure

- We also measure investor attention using the number of SEC filings filed prior to the SEO announcement date.

### Market Reaction upon SEO and Operating Performance

#### Table

<table>
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<tr>
<th>Dependent Variable</th>
<th>ROA</th>
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<td>(2)</td>
<td>(3)</td>
<td>(4)</td>
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<td>4305</td>
<td>4193</td>
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</tbody>
</table>

- The results are consistent with our baseline results.

### Identification 2: Instrumental Variable Analysis

- To control for unobserved firm characteristics, we construct the "abnormal" investor attention measures as the difference between the media coverage of an SEO firm immediately prior to its SEO and the media coverage of the same firm exactly one year before its SEO announcement date.