Journal of Corporate Finance 31 (2015) 271–283

Contents lists available at ScienceDirect

Journal of Corporate Finance

journal homepage: www.elsevier.com/locate/jcorpfin

SEO announcement returns and internal capital market efficiency

Aigbe Akhigbe [a,1], Ann Marie Whyte [b,*]

[a] Department of Finance, University of Akron, Akron, OH 44325, United States
[b] Department of Finance, University of Central Florida, Orlando, FL 32816-1400, United States

ARTICLE INFO

Article history:
Received 23 July 2014
Received in revised form 23 February 2015
Accepted 24 February 2015
Available online 4 March 2015

JEL classification:
G31
G32

Keywords:
Seasoned equity offerings
Internal capital market efficiency
Diversified firms
Multiple segment firms
Follow-on offerings

ABSTRACT

We test the hypothesis that efficient internal capital markets mitigate the negative announcement returns surrounding seasoned equity offerings (SEOs). Our predictions are based on the argument that efficiency reduces uncertainty regarding the value of assets-in-place. Having established the inverse association between our efficiency measures and uncertainty, we show that the efficiency measures are positively associated with SEO announcement returns, particularly among firms with multiple segment codes. The positive relation suggests that efficiency mitigates uncertainty regarding the value of assets-in-place, and this is the channel through which more favorable announcement returns are produced in response to the SEOs of high efficiency firms.

1. Introduction

Publicly-traded firms are continually confronted with decisions regarding the allocation of internal funds. These decisions are magnified for multiple-segment firms that have access to a potentially more dynamic internal capital market where funds can be transferred across segments, providing cross-subsidization and minimizing the need for external financing.[2] These firms may also access external capital markets in the form of seasoned equity offerings (SEOs). Empirical evidence shows that, on average, SEO announcements generate significant negative abnormal returns (Masulis and Korwar, 1986) and a discount averaging three percent relative to the closing price on the day before the issue (Mola and Loughran, 2004).

Several explanations have been offered for this phenomenon. The price-pressure hypothesis (Scholes, 1972) contends that the demand curve for a firm's shares is downward sloping. The information asymmetry hypothesis argues that managers have superior information relative to the investing public. Consequently, the decision to issue shares sends a negative signal, and rational investors assume that the firm is using its proprietary information to benefit existing shareholders at the expense of new shareholders (Myers

* Corresponding author. Tel.: +1 407 823 3945; fax: +1 407 823 6676.
E-mail addresses: aigbe@uakron.edu (A. Akhigbe), awhyte@bus.ucf.edu (A.M. Whyte).
[1] Tel.: +1 330 972 6883; fax: +1 330 972 6588.
[2] Maksimovic and Phillips (2013) note that there is a tendency to conflate internal capital markets and diversified firms, but the two are distinct. They note that a firm with an internal capital market uses either its own funds or external capital to finance investments. We use the term in this general context where it is applicable to both single- and multiple-segment firms.

http://dx.doi.org/10.1016/j.jcorpfin.2015.02.006

and Majluf, 1984). Consistent with this hypothesis, Lee and Masulis (2009) find that poor quality accounting information, a proxy for uncertainty, is associated with higher flotation costs and larger negative SEO announcement effects. They contend that information asymmetry increases uncertainty about the firm's financial picture, possibly lowering demand for the issue and raising underwriting costs and risk. Their findings suggest that if information asymmetry is reduced, the negative announcement effects of SEOs can be mitigated.

One factor that may reduce information asymmetry is the efficiency of the firm's internal capital market. Studies have separately examined internal capital markets (e.g., Billett and Mauer, 2000, 2003; Gopalan et al., 2014; Matvos and Seru, 2014), as well as the stock market reaction when firms tap external capital markets (e.g., Corwin, 2003; Masulis and Korwar, 1986; Mola and Loughran, 2004). However, no study to date has linked the two markets in the manner proposed in this study. In this study, we ask and answer the following research question: does an efficient internal capital market mitigate the negative announcement effects of SEOs? Building on the model developed by Cooney and Kalay (1993), we argue that efficient internal capital markets reduce uncertainty regarding the value of assets-in-place. Thus, efficient firms should experience a more favorable reaction to their SEO announcements.

Our empirical analysis is based on a sample of SEOs occurring between 1996 and 2012. Initially, we conduct a comprehensive analysis of SEO announcement returns to establish consistency with prior literature and confirm that the average SEO announcement returns are significantly negative. We then calculate three alternative measures of internal capital market efficiency based on the work of Billett and Mauer (2000, 2003) and validate that the measures are inversely related to uncertainty regarding the value of assets-in-place. Having established the inverse association between our efficiency measures and uncertainty, we show that the efficiency measures are positively associated with the SEO announcement period returns. The significant positive relation is most apparent among firms with greater diversity in their segment codes but fewer segments. We interpret these results as follows: diversity conveys an advantage up to a certain level beyond which the benefits of diversification may be offset by being overextended in terms of the number of segments. In effect, a certain amount of focus is required to capitalize on the benefits of internal capital market efficiency. The strong positive relation suggests that efficient internal capital markets mitigate uncertainty regarding the value of assets-in-place, and this is the channel through which more favorable stock price reactions are produced in response to the announcements of SEOs by high efficiency firms.

Our work demonstrates the interplay between the functioning of the internal capital market and the market response when firms access external equity markets. Our results suggest that firms can mitigate the negative effects of accessing external equity markets by demonstrating their ability to efficiently manage internal capital markets. This finding is fully consistent with Cooney and Kalay's (1993) model in which lower uncertainty regarding assets-in-place relative to investment opportunities predicts positive SEO announcement returns. The conclusions derived from our analysis are also broadly related to the recent evidence provided by Matvos and Seru (2014) regarding the interaction between internal capital markets and external capital market stress. They demonstrate that some firms reallocate internal capital in a manner that mediates the effects of the recent financial crisis. The results presented in this paper provide further evidence regarding the interconnectedness of internal and external equity markets, and point to the importance of considering the efficiency of internal capital markets when analyzing SEO announcement returns.

The remainder of the paper is organized as follows. Section 2 develops our hypotheses, Section 3 discusses the sample design, Section 4 outlines our methods, Section 5 presents summary statistics that lead into the discussion of our empirical findings in Section 6, and Section 7 presents concluding remarks.

2. Hypotheses development

2.1. Efficiency and SEO announcement returns

Our primary hypothesis is that the efficiency of internal capital markets should be positively related to SEO announcement period returns. The Myers and Majluf (1984) model depicting the classic situation in which managers have more information than investors, has been the foundation for much of the theory regarding the negative announcement returns surrounding SEOs. In their model, the negative announcement returns may be explained in terms of adverse selection. If the firm's assets-in-place are undervalued by the market, informed managers will reason that any gains from pursuing positive net present value (NPV) projects will be offset by the dilution imposed on existing shareholders. Under this scenario, the firm would choose not to issue equity. Conversely, the decision to issue conveys negative information regarding the overvaluation of assets-in-place, which more than offsets any positive information effects associated with the new project. These ideas have been developed in a more dynamic setting by Lucas and McDonald (1990) and Carlson et al. (2006).

A key implication of the Myers and Majluf (1984) model is that SEO announcement returns are negative. Extensions to the model by Cooney and Kalay (1993) allow for both positive and negative effects to accompany SEO announcements. They note that the prediction of non-positive effects by Myers and Majluf (1984) derives from their underlying assumption that managers only undertake positive NPV projects. Cooney and Kalay (1993) extend the model by allowing for both positive and negative NPV projects. This modification implies that rejection of the project (i.e., a decision not to issue) is not necessarily indicative of the undervaluation of assets-in-place. Indeed, it is more likely indicative of the project in question having a negative NPV. Similarly, when the firm announces an equity issue, the information could be positive if the market anticipates a positive NPV project. Cooney and Kalay find in their simulations that decreasing the uncertainty regarding the value of assets-in-place or increasing the uncertainty regarding investment opportunities results in more favorable SEO