EARNINGS MANAGEMENT AND IPO UNDERPRICING

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ABSTRACT

This study explores earnings management as one plausible explanation for the IPO underpricing anomaly. We examine whether discretionary accruals are interpreted differently by market participants: underwriter and investors resulting in higher initial returns. We document that discretionary accruals are a significant factor in explaining IPO underpricing especially during the pre-bubble period (1990-1997). These findings point to the possibility to different incentives for earnings management before, and after the IPO.

INTRODUCTION

The IPO underpricing, defined as the difference between the first day closing price and the offer price was first documented by Ibbotson (1975). Loughran and Ritter (2004) find that the average first day returns has never been negative over for the last 23 years examined, and that the amount of underpricing has been as high as 71.7%. Several studies have tried to identify potential sources of this underpricing, such as market cycles (Lowry and Schwert, 2002), buying positive analyst coverage (Cliff and Denis, 2004), ownership structure (Ljungqvist and Wilhelm, 2003; Hill, 2006), behavioral explanations such as investor sentiment (Ljungvist, Nanda and Singh, 2006), and prospect theory (Loughran and Ritter, 2002). Despite our understanding of all these factors that explain the initial returns, IPO underpricing remains an anomaly in capital markets research.

This research explores another possible source for this IPO underpricing– earnings management. Issuers of IPO can use discretionary accounting accruals adjustments that can increase reported earnings (relative to the cash flows). If buyers are guided by the reported earnings and earnings growth number, they may over-pay for the IPO stock if the reported earnings are inflated through accounting accruals. Because the underwriters engage in due diligence and are privy to additional information on the IPO firm, they are less likely or unlikely to be influenced by the management of earnings through accruals. The investors' reliance on reported earnings and the underwriters' ability to see through the management of earnings (through accruals) will lead to an additional source of underpricing of the IPOs. In this scenario, the larger is the extent of earnings management, larger will the amount of IPO underpricing. Therefore, our study examines whether the discretionary accruals explain the cross-sectional variation in IPO first day returns, after controlling for factors identified in the prior literature.

Unlike other studies that examine long-term performance of the IPOs (Teoh, 1998a, 1998b), we use accruals data to explain the first day returns. This issue of earnings management around IPOs is important for several reasons: First, it has not been examined in the prior literature. Second, even though the incentives to manage earnings exist in periods subsequent to the IPO, managers are more likely to engage in earnings management in an attempt to create a successful IPO. None of the prior studies have examined the role of pre-IPO or IPO year accruals in explaining the IPO *initial* underpricing. This paper is the first attempt in this direction and will add to our knowledge on the role of accruals in understanding of the IPOs.

The rest of the paper is organized as follows. Next section presents a brief overview of theories that explain the existence of IPO initial returns, market mispricing of accruals, and development our empirical hypotheses. Last section describes our data and discusses results from empirical.

HYPOTHESES DEVELOPMENT

Finance researchers have documented that, on average, IPO shares are underpriced relative to the first day closing price (Ibbotson, 1975). Lowry and Schwert (2002) empirically test IPO initial returns across firms. Using Benveniste and Spindt's (1989) model, Lowry and Schwert document that offer price is partially adjusted with respect to IPO underpricing. They also incorporate Loughran and Ritter's (2002) finding that price adjustment to publicly available information is also partial. Loughran and Ritter (2004) examine reasons behind underpricing changes over time. They proposed three non-mutually exclusive explanations: change in risk composition, a realignment of incentives, and a changing issuer objective function.

The analysis of cash flows and accruals is important from financial statement analysis point of view, and heavily emphasized in most advanced financial analysis texts. The underlying reason for this separation is that cash flows and accrual components of earnings have differential long-term persistence and, hence, not the same impact in forecasting future earnings. Because the future earnings are the basis of valuation for most valuation models, this lack of understandings in the properties of the components of earnings can result in mispricing of a firm's stock. Sloan (1996) documents that firm with high current accruals will exhibit lower earnings persistence, and that these differences in persistence can be used to earn abnormal returns.

We construct our hypotheses on the IPO underpricing, based on the mispricing of accruals as follows:

If the issuers use accruals and deferrals related to working capital accounts, we would expect underpricing to be higher for IPOs with higher discretionary accruals. Stated in alternate form, our hypothesis is as follows:

Hypothesis 1: IPO Underpricing is an increasing function of discretionary current accruals.

If the issuers use accruals related to long-term investments, we would expect underpricing to be higher for IPOs with higher discretionary accruals. Stated in alternate form, our second hypothesis is as follows:

Hypothesis 2: IPO Underpricing is an increasing function of discretionary long-term accruals.

EMPIRICAL RESULTS

We construct samples based on availability of firm-specific financial data on COMPUSTAT to estimate the reported and discretionary accruals. Our final sample consists of 777 IPOs with complete data available for up to one fiscal year prior to the IPO.We test our hypotheses on the relationship between initial return and discretionary accruals by estimating an ordinary least square (OLS) regression model at the firm level with initial returns as the dependent variable. We control for IPO related variables, consistent with the models of Lowry and Schwert (2002), Cliff and Dennis (2004), and Loughran and Ritter (2004), to arrive at our specification as follows:

$$IR_{it} = \alpha + \beta_1 Rank_{it} + \beta_2 AST_{it-1} + \beta_3 NYSE_{it} + \beta_4 NMS_{it} + \beta_5 AMEX_{it} + \beta_6 Tech_{it} + \beta_7 \Delta P_{it} + \beta_8 \Delta P^{+}_{it} + \beta_9 MKT_{it} + \beta_{10} MKT^{+}_{it} + \beta_{11} DCA^{+}_{it} + \beta_{12} DCA^{-}_{it} + \beta_{13} DLTA_{it} \quad (1)$$

To test Hypothesis 1 that IPO underpricing is an increasing function of discretionary current accruals; we examine the parameter estimates for DCA+, and DCA–. For the pre-bubble period, we find coefficient of both DCA+ (0.7098) and DCA– (4.0961) to be positive and significantly greater than zero at conventional levels of significance (0.05 or better). We reject the null hypothesis of association

between issuers' discretionary current accruals and underpricing, against the one-sided null. In other words, manipulation of discretionary current accruals upwards is viewed by underwriters and aftermarket investors differently leading to variation of initial returns.
To test hypothesis 2, the variable of interest is discretionary long-term accruals. We find the coefficient of DLTA to be positive and significant at conventional levels of significance (0.05 or better). We reject null hypothesis of no association between DLTA and IR against one-sided null. This finding is consistent with the notion that IPO firms that manipulate discretionary long-term accruals are viewed differently by underwriters and investors resulting in the variations of initial returns. Collectively, these results illustrate a strong association between discretionary accruals and initial returns. Issuers that report higher earnings through discretionary accruals have higher returns on the first day of trading.
We also examine our hypotheses for the bubble period. In the regression that includes our test variables, the coefficient for DCA+ is positive and significant, but for DCA– it is not significant at conventional levels of significance (0.05 or better). This is consistent with our finding that manipulation of current accruals leads to larger underpricing. However, during the bubble period, it is confined to positive manipulators of earnings only. We do not find the coefficient for DLTA to be significant during the bubble period. One interpretation could be that firms come to the IPO markets during the internet boom period have distinctive feature that are different from regular time period. IPO firms go public during that bubble period without concerns for negative earnings and that the underpricing is primarily driven by investor irrational exuberance.

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