

Does success of an IPO issuance guarantee IPO investors' success?

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Introduction

- ▶ For the stock issuers, IPO is successful if the revenue from the limited sale of shares is maximized.
- ▶ Studies suggest that investors highly rely on these “signals”, particularly, the firm’s pre-IPO profitability; Thus, the presence of positive “signals” can predict the stock sales and prices, i.e. success from the owners’ perspective.
- ▶ However, these factors might not predict the post-IPO performance of the firm, which defines success of an IPO for investors.

Related Literature

- ▶ Grinblatt and Huang (1989), Allen and Faulhaber (1989) applied a “Signalling” theory developed by Engers (1987) to the IPO market and found that underpricing and retainment of the issues “signal” high value of an IPO.
- ▶ Ritter, Kim and Welch (1999, 2002) successfully utilized comparable firm future P/E, M/B, P/S multiples to predict the issuance success of an IPO.
- ▶ Carter, Dark and Singh (1998) and Bajo, Chemmanur, and Simonyan (2016) showed that size of the stock sales depend on underwriter’s prestige and “noise-spreading” ability.
- ▶ Jain and Kini (1994) and Pastor, Taylor and Veronesi (2006) discovered post-IPO profit decrease in both asymmetric and non-asymmetric market.

Data/Sample Description

- ▶ The data is derived from CRSP, COMPUSTAT, EDGAR databases and is comprised of 42 firms that went IPO between 1985 and 2005.
- ▶ The sample will consist of randomly selected IPOs from the Prof. Jay Ritter's IPO list (updated Jan 2018).
- ▶ Proceeds, Total Equity (TE), projected Price to Earnings ratios, % of retained issues are calculated from CRSP, COMPUSTAT and firm prospectuses. Profitability is measured as an average of ROE and ROA. Underwriter's reputation is measured with the Carter and Manaster method.
- ▶ Issuance success ratio = $\frac{[\text{Proceeds} / \text{Pre-IPO TE}]}{[(\text{shares issued in IPO}) / (\text{Pre-IPO shares} + \text{shares issued in IPO})]}$.
ROE = $\text{Net Income} / \text{TE}$. ROA = $\text{Net Income} / \text{Total Assets}$

Research Method

- ▶ The null hypothesis and regression model investigated in this study are as follows:
- ▶ H_0 : Success of an IPO Issuance ensures high post-IPO profitability (IPO success) for new shareholders.
- ▶ The following regression model is employed to test this hypothesis.

$$P_t = b_0 + b_1 S_t + \epsilon_t \text{ where } S_t = b_0 + b_1 U + b_2 P_{t-1} + b_3 R_t + \epsilon_t$$
- ▶ P_t and P_{t-1} are firm's pre and post IPO profitability measured by ROE and ROA, S_t is IPO issuance success ratio, % increase in total equity per % of firm ownership sold, U is underwriter's ranking, and R_t is % of retained issues.
- ▶ The Issuance success ratio is assumed to be the most accurate measure of the IPO issuance success for pre-IPO owners.

Results

- ▶ Pearson Correlation between pre-IPO profitability and IPO Issuance success ratio (ISR) is 0.76 and Pearson Correlation between IPO ISR and post-IPO profitability is 0.31. The results are significant at the 99 percent confidence level.
$$P_t = b_0 + b_1 S_t + \epsilon_t$$
 where $S_t = b_0 + b_1 U + b_2 P_{t-1} + b_3 R_t + \epsilon_t$
- ▶ Coefficient of $P(t-1)$ is 0.51, and coefficient of $S(t)$ is .023. The results are significant at the 99 percent confidence level.
- ▶ Spearman Rank Correlation for $S(t)$ is 0.751 which is significant at the 95 percent confidence level.

Conclusion

- ▶ Success of an IPO Issuance does not ensure high post-IPO profitability (IPO success for new shareholders).
- ▶ Regression results indicated a statistically significant positive coefficient for the IPO Issuance success ratio. This indicates that IPO Issuance success is inversely related to the firm's post-IPO profitability.
- ▶ Percentage of retained issues is not significant for the determination of IPO Issuance success, however, it could be positively related to high post-IPO profitability.
- ▶ I reject the null hypothesis that Success of an IPO Issuance ensures firm's high post-IPO profitability.

Future Research

- ▶ The use of projected multiple valuation ratios as suggested by Prof. Jay Ritter would allow to obtain a more accurate data on the post-IPO valuation measures.
- ▶ Further investigation of the relationship between % of retained issues and post-IPO profitability. Inclusion of financial leverage and economic environment variables in the determination of IPO Issuance success.
- ▶ Conducting non-parametric Kruskal - Wallis test on the profitability data as this type of analysis is specifically effective in addressing differences between ROA and ROE ratios.
- ▶ Impact of each factor in the IPO Issuance success equation will be used in the new regression analysis with the post-IPO profitability as a dependent variable.