

DOES THE TIMING OF EQUITY ISSUES INFORM CORPORATE POLICY?

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Abstract

This study examines the timing of share issuances to meet corporate capital needs. The study uses specific data from share offering transactions in Indonesia for the period 2000-2020. This study provides an understanding of companies' motivations for selling their shares, taking into account market timing in the dynamic stock markets of developing countries. The study's findings have implications for capital market players, particularly potential investors, in understanding the information implied in the share prices offered by issuers at the time of issuance. The analysis reveals that companies offer larger shares when they are overvalued. Companies choose to offer shares when they are overvalued to maximize profits from the sale of their shares to meet their capital needs. Market timing considerations in share issuances are a share issuance policy that leverages investor perceptions in assessing market information. Companies intentionally offer shares when the share price is overvalued to profit from temporary pricing errors. The allocation of profits in these transactions reflects information about the company's future policies. In general, the proceeds from these share sales are used by companies to increase capital for business development and, to some extent, to reduce corporate debt.

Keywords: **Equity issues, Mispicing, Overvalued, Market timing, Information**

INTRODUCTION

Market timing in equity issuance occurs when shares are offered at a price higher than the market price. This hypothesis is expected to generate profits from the difference, which exceeds the mispricing of the shares. High market valuation is a key determinant of equity issuance, helping to explain how companies adjust their capital structure (Baker & Wurgler, 2002). Several previous studies have found that stock returns during the announcement period tend to be negative and very low for five years following the issuance announcement (Loughran & Ritter, 1995). One explanation for their findings is that managers time equity issuances to capitalize on overvalued shares. This explanation requires optimistic investor perceptions of the company's prospects at the time of the issuance announcement. Furthermore, market timing is maximized if investors underreact to the information contained in the initial public offering announcement.

A key assumption in the market timing hypothesis is that high market valuations at the time of issuance provide an opportunity to issue equity at a lower cost. Several studies testing market timing theory in various economic environments provide robustness tests for the regularity of the empirical research results. Mahajan & Tartaroglu (2008) found evidence of market timing in the G-7 countries. Furthermore, Ratih (2019) utilized emerging market capital market data to argue that market timing is a primary motive for stock issuance in Indonesia. Loughran et al. (1994) provide substantial evidence that market timing is a significant factor in Initial Public Offerings (IPOs), particularly in developing East Asian countries.

Previous research has extensively documented the underlying reasons why companies undertake equity offerings, including both Initial Public Offerings (IPOs) and Seasoned Equity Offerings (SEOs). Furthermore, numerous studies have compared the performance of company stocks before and after equity issuances. However, the literature focusing on the timing of SEO and the allocation of proceeds is still scarce, particularly in developing countries. The result represents a research gap that requires further discussion. An opportunity for this research is to

examine the relationship between the underlying motives for timing an SEO and its information content.

In practice, several challenges exist in implementing market timing. Investors tend to interpret a stock issuance as bad news, which, in Myers and Majluf's (1984) pecking order model, is driven by information asymmetry. According to the pecking order theory, a stock offering in an SEO reveals negative information about the company's value. If the market incorporates information slowly, a company can transfer wealth from new to existing shareholders by issuing equity at a time when the company's stock is overvalued. This information gap gives rise to the investor perception that the new equity offering is being conducted because the company's shares are overvalued, thus causing the new equity offering to decrease the company's share price. Therefore, considering investor perceptions, companies need to consider the appropriate timing for re-offering their shares.

Another perspective argues for an agency problem, which suggests that capital is not being used in a way that maximizes firm value (Jensen & Meckling, 1976). Suppose a company does not appear to be experiencing promising growth. In that case, agency theory predicts that the company is more likely to use capital for agent purchases or to enrich itself opportunistically. These motives and information content are the primary questions of this study, as capital structure policies are inherently subject to information asymmetry and agency problems. In reality, based on the abnormal returns on each share issuance, companies achieve negative returns. In other words, companies underperform when they raise external capital and expect lower future returns. The market will interpret public offerings as an indication that the company needs cash or is facing financial difficulties, creating a negative information signal for the announcement and equity offering. Therefore, the question arises: why do companies continue to access external funding sources by issuing shares? The question can be answered through a comprehensive analysis of the motivation for issuing shares and the allocation of proceeds. Furthermore, information asymmetry and the timing of the offering significantly influence investor perceptions of the issuing company's performance.

In the context of emerging markets, such as Indonesia, the *Otoritas Jasa Keuangan* (OJK) has taken several steps to address information issues, but these are not easily resolved. Furthermore, empirical evidence demonstrates the prevalence of information asymmetry in the Indonesian capital market, as reported by Utamaningsih et al. (2015). Similarly, the Indonesian stock market, as an emerging market, is more interesting for research because it exhibits unique market reactions that differ from those of other developing countries. Ratih (2019) explained in her study that market timing is a consideration, but it doesn't significantly influence a company's decision to issue shares. The primary reasons for issuing shares are the need for funds for investment and the company's reduced ability to raise debt from creditors.

Market Timing and Equity Issues

The timing of a stock offering is typically based on changes in information asymmetry over the business cycle. If adverse selection costs are associated with asymmetric information between companies and investors, unfavorable macroeconomic conditions will lead companies to issue shares that are less sensitive to information. Therefore, the prevailing hypothesis is that stock issuance is negatively related to overall business conditions (Erel et al., 2012). Valadkhani and Smyth (2018) state that information asymmetry hinders companies' interests in determining policy. Furthermore, there are many possibilities where equity prices will be more frequently mispriced. Therefore, companies have an incentive to choose debt securities when facing information problems. Available empirical evidence suggests that information asymmetry plays a significant role in influencing equity offering decisions (Sony & Bhaduri, 2021). While the literature on equity offerings and operating performance has been extensive, very little has focused on the motives and information contained in an equity offering, explicitly linking it to

the method of the offering. Furthermore, there are no empirical studies demonstrating whether patterns in equity offering decisions vary across economies and periods.

Based on the theoretical model, the first hypothesis will analyze how companies tend to choose to issue shares. This hypothesis aims to determine the implicit motivations behind the equity issuance. The hypothesis refers to previous research that concluded that market timing is one of the most common reasons companies use when considering the timing of an equity offering (Loughran & Ritter, 1997). Market timing refers to the decision to issue shares when the stock price deviates from its intrinsic value. Mispriced shares can help companies determine the right time to raise additional capital.

Santos and Gama (2023) examined insider trading, which is considered relevant to the market timing literature. They argue that when companies consider market timing, managers may engage in opportunistic actions to sell their private shares by exploiting information asymmetry. Companies will offer their shares when they are overvalued, as reflected in a high M/B value, resulting in a correction in the share price due to an increase in the number of shares outstanding. Therefore, the research hypothesis is that share offerings are positively related to the market-to-book value of the stock. Furthermore, there is the possibility of behavioral bias in the stock market. The question is whether investors understand the significance of market timing in stock issuance and how they react to this event. This study analyzes stock issuance in terms of timing, price, and allocation of offering funds. Therefore, it is essential to investigate whether the momentum of stock issuance, taking into account market timing considerations, influences investor trading behavior in the Indonesian capital market.

Furthermore, this research has quite interesting implications because the results will open up a discussion for investors about the implied motivations of issuing companies when offering their shares. This research is structured as follows: The first section provides an overview of the research background. The second section discusses the motivations for market timing considerations. The third section explains the sample selection and provides a summary of the statistical data. The fourth section is the central part of the research, which includes empirical findings. Finally, the fifth section presents the discussion and conclusions of the research.

RESEARCH METHODOLOGY

The initial sample in this study includes all Seasoned Equity Offerings (SEO) by companies listed on the Indonesian capital market between 2000 and 2020. Non-probability sampling was used because the research requires specific data. To identify all SEOs, we documented every change in equity capital for each company listed on the Indonesia Stock Exchange (IDX). We then determined the period and volume of share issuance to ensure the implementation of market timing and the influence of company characteristics. Based on data limitations and availability, a final sample of 151 SEOs was obtained through the Indonesian capital market database, the Indonesian Capital Market Directory (ICMD), Thomson Reuters-EIKON, and OSIRIS.

Table 1 summarizes the characteristics of the research sample. The authors used three primary variables in the analysis of the influence of market timing: market-to-book ratio, volume, and tangible assets, as proxies for the allocation of proceeds from stock issuance. Other independent variables include characteristics of the issuing company, such as return rate, company size, and length of operation. This study aims to investigate the equity offerings made by a company following its Initial Public Offering (IPO). The authors employ a binary logistic regression model to examine the impact of mispricing on a company's decision to issue new shares. In this case, the dependent variable takes the value of one if the company chooses to issue shares and zero otherwise.

Table 1. Descriptive Statistics

	(1) Mean	(2) Std. Dev.	(3) Min	(4) Max
SEO	.0993	.3001	0	1
M/B	1.741	2.622	.0581	13.49
ROA	.0088	.0901	(.7348)	.3587
Obj.	.2081	.2523	.0000	.9223
Size	26.70	3.339	17.64	32.02
Age	16.37	6.659	3	29
Vol.	.0024	.0112	(.0284)	.0461
Lev.	4.116	7.255	(19.44)	32.4

N: 151

Next, we measure the degree of stock overvaluation faced by the company by including the variable M/B, which estimates the difference between the stock's book and market value. We also include proxies for the motivation for issuing shares through tangible assets and leverage to determine the allocation of proceeds. To explore the implications of market timing, we adopt a two-stage estimation procedure developed by Chen et al. (2010), using a structural choice model as follows:

$$Y_i = \beta_0 + \beta_1(FQ) + \beta_2(Mkt) + \beta_3(Control) + e_i$$

Where Y_i is the binary dependent variable for offering i , taking the value of one when choosing to issue shares and zero otherwise. The independent variable FQ represents the primary variable for firm quality, encompassing volume, issuance motivation, and leverage. The explanatory factor Mkt represents a set of variables related to potential market undervaluation, including the issuing firm's BHAR (-6,-1), the market-to-book ratio over the past 6 months, and the market BHR (-6,-1). Finally, our control variables include the firm's stock price elasticity and dummy variables for year and industry.

RESULT AND DISCUSSION

Table 2 below provides estimates of the study's structural model. The dependent variable is a choice variable, taking the value of one if shares are issued and zero otherwise. The main variables of interest relate to market timing and operating performance, both at the firm and market levels.

Table 2. Structural Model of Stock Offering Mechanism Selection

	(1)	(2)	(3)	(4)	(5)
M/B		0.051** 0.3945			0.005*** 0.2753
Obj.			0.024** (1.240)		0.744 0.2219
ROA				0.069*	0.862

Size	0.001*** 0.3246	0.999 (3.731)	0.992 (3.782)	(1.635) (3.954)	(0.3979) (3.390)
Age	0.902 (0.0029)	0.008 (1.211)	0.010 (1.482)	0.009 (1.415)	0.013** (1.859)
Vol.	0.423 (15.51)	1.112 (0.055)	2.212 (0.114)	1.067 (0.051)	2.725 (0.148)
Lev.	0.014** (0.758)	0.014 (0.758)	0.013 (0.690)	0.018 (0.937)	0.016** (0.805)
_cons	0.000*** (0.997)	0.0234** (0.627)	0.064 (0.119)	0.063 (0.127)	(0.581) (0.984)
Obs.	151				
Pseudo R2	0.1927				
Chi2	18.75				

t-statistics in parentheses

* $p < 0.1$, ** $p < 0.05$, *** $p < 0.01$

Estimates from the structural model provide evidence consistent with the market timing hypothesis of stock issuance and the undervaluation hypothesis. Firms that choose stock offerings have a significant positive relationship with the level of stock mispricing, both in partial and simultaneous regressions. The significance of the market timing variable is high at 1%, indicating that the company's motivation for issuing shares is to capitalize on opportunities for stock mispricing. These results also imply that companies face lower information asymmetry and therefore choose to issue shares when they are overvalued. Larger companies tend to be more motivated by mispricing opportunities than smaller companies. The allocation of issuance proceeds also appears to be used to reduce corporate debt, with a significance level of 5%. Based on the availability of information implied in stock issuance through several control variables in the analysis, it is evident that some firms in the study sample face relatively low information asymmetry and tend to have market timing motivations in their stock issuance. When the market has lower levels of information asymmetry, companies decide to issue shares. Conversely, companies do not issue shares when facing higher information asymmetry to avoid the costs of providing information. The evidence presented in this study is consistent with previous research that suggests that the number of companies issuing shares is positively related to the age and size of the company. The information-based capital structure model argues that older and larger firms face lower information asymmetry (Andriosopoulos & Panetsidou, 2021; Chen et al., 2010).

Companies with negative net income and high potential for undervaluation tend to delay share issuance if other factors remain constant. This finding is consistent with research conducted by Andriosopoulos & Panetsidou (2021). These results imply that market timing considerations tend to favor share issuance mechanisms with lower levels of information asymmetry. The decision to issue shares when overvalued allows companies to achieve a more positive return on the share offering, thus confirming the hypothesis in this study. The analysis of the allocation of share issuance proceeds in this study only covers debt reduction and asset addition. Therefore, it is recommended that future research include variables such as the motivation for share issuance in terms of the allocation of share offering proceeds, specifically whether they will be used to finance investments or simply held as cash, to gain a deeper understanding of the information behind the share offering decision.

Robustness Test

To test the robustness of our findings, we used different periods for measuring overvaluation as the market timing variable. This period, slightly shorter than the previous one, lasted 10 days to determine whether the choice of offering mechanism would remain the same if the stock market value were to change. Therefore, the first robustness measure incorporates the information we expect to hear regarding the offering and market timing considerations. The findings from this robustness method are presented in Table 3, which aims to observe a positive relationship between SEO and overvalued stocks. The findings confirm the initial model's claim that firms with lower information gaps are more likely to offer stocks when the stock is overvalued.

Table 3. Robustness check: overvaluation measurement in different periods

	(1)	(2)	(3)	(4)	(5)
M/B		0.092 (1.160)			0.174** (1.969)
Obj.			0.024 (1.240)		0.033* (1.657)
ROA				0.069 (1.635)	0.090** (2.074)
Size	1.059*** (3.998)	0.998*** (3.727)	0.992*** (3.782)	1.051*** (3.954)	0.886*** (3.399)
Age	0.008 (1.187)	0.008 (1.179)	0.010 (1.482)	0.009 (1.415)	0.012* (1.801)
Vol.	1.323 (0.064)	1.129 (0.055)	2.212 (0.114)	1.067 (0.051)	2.540 (0.136)
Lev.	0.014 (0.777)	0.014 (0.746)	0.013 (0.690)	0.018 (0.937)	0.016 (0.804)
_cons	0.343 (0.746)	0.343 (0.726)	-0.064 (-0.119)	0.063 (0.127)	-0.539 (-0.916)
Obs.	151				
Pseudo R2	0.1927				
Chi2	18.93				

t-statistics in parentheses

* $p < 0.1$, ** $p < 0.05$, *** $p < 0.01$

We examined whether the sensitivity of investment to the principal capital raised in a rights issue varies with the firm's market-to-book ratio. We did this because rights issues motivated by high valuations are more likely to occur in firms with relatively high market-to-book ratios. We found that firms with low market-to-book ratios allocate relatively more resources to inventory, capital expenditures, acquisitions, and long-term debt reduction than firms with high valuations. Conversely, firms with high market-to-book ratios tend to retain a greater proportion of the cash raised than firms with low valuations. This finding suggests that firms with low market-to-book ratios tend to conduct rights issues to fund investments. In contrast, firms with high market-to-book ratios are more likely to issue rights to capitalize on their higher valuations. In other words, market timing considerations often arise through rights issues, even though the allocation of proceeds remains highly variable.

CONCLUSION AND IMPLICATIONS

The information-based capital structure model suggests that, in the presence of information asymmetry, firms tend to opt for equity with lower information asymmetry due to higher information costs. This research finding highlights the significance of information asymmetry

in determining the timing of share issuance. Furthermore, market timing considerations suggest that stock market conditions influence the issuance of new shares. The majority of companies choose to issue shares when stock mispricing is high. The utilization of share offering proceeds varies widely depending on how the market values the share price.

Overall, the results suggest that share offerings are conducted to raise investment capital and capitalize on favorable market conditions. Companies sometimes issue shares to time the market, taking into account price considerations. However, companies also issue shares when share prices are unfavorable. In such cases, the offering is more likely to consist of preferred shares, and the proceeds raised are used to finance acquisitions, purchase inventory, make capital expenditures, or reduce long-term debt.

This study contributes to the corporate finance literature by first providing empirical evidence regarding the impact of information asymmetry on share offerings in emerging economies. Second, market timing is also a critical issue to consider when companies wish to raise equity through a public offering. This contribution relates to costs and investors' assessment of the company's objectives in choosing a share offering mechanism and the returns generated from such an offering. By considering market timing, companies can maximize the returns from their share offerings.

On the other hand, this study has several limitations that may serve as a reference for further research. This study did not consider internal ownership, which we believe could serve as a starting point for determining the motivations behind share issuance, with clearer market timing considerations. Several studies have hypothesized that managerial ownership is positively correlated with the choice of share issuance mechanism.

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