

## Theoretical Literature on Seasoned Equity Offerings

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### Abstract:

*The main objectives are to investigate thoroughly SEOs in the context of emerging market with Vietnamese stock market case. This objective serves to fill the gap of literature lacking in this region. Besides, it is among the first study in Vietnam to focus on many aspects of SEOs in terms of determinants of company's SEOs motivation, market reaction and determinants of market reaction to company's SEOs.*

**Keywords:** Covariance matrix, Vietnam stock market

### 1. Introduction

The Vietnamese stock market has been developing for 20 years since the Ho Chi Minh City Stock Exchange Seasoned equity offerings (SEOs) draw enormous attention from researchers around the world. This method is an effective and popular way to expand company financial resources to maintain and develop its activities, to reconstruct capital and stakeholder structure of company. In order to finance companies' activities, they can choose either internal sources or external sources of funding. While the former mainly refer to profit or retained earnings, the latter mention the concept of debt financing as well as equity financing. To estimate company's financing decisions Modigliani and Miller (1958, 1963) suggest that capital structure is not consistent with firm value. Nevertheless, this observation is based on the important assumption that the market is perfect. The idea of perfect capital market consists of the following characteristics: (i) companies are classified based on their risk; additionally, companies having the same risk generate similar returns; (ii) perfect capital market which implies that there is no transaction cost, also no tax or bankruptcy cost; (iii) the interest rate for lending and borrowing activities are similar for private and investors as well as corporation. However, in the real market, tax is deducted from interest expenditure. Nevertheless, debt financing pressure may discourage firms to entirely use debt financing instead of equity financing (Huang, 2012). Besides the trade-off theory which mainly discuss tax shield as well as financial distress, there are also other factors affect the financing decision of company including information asymmetry costs, agency conflict costs and the availability of promising growth opportunities

Besides, a trend of increasing international equity issuance has also been reported, especially after the financial crisis in 2010. To compensate for the losses and larger writedowns suffering from the crisis as well as to raise capital in the prediction of more strict regulations will occur, global financial institutions have to raise equity issuance substantially. A report of Bloomberg in July 2010 shown that financial institutions, mainly from Europe and the United States, since mid- 2007 had raised US\$1.5 trillion equity issue to offset their crisis losses (Witmer, 2010).

The paucity of literature and case study in emerging market where results are inclusive also urge a solution. There have been many research to find out company and market behavior such as determinants of companies that lead them to conduct SEOs, impact of SEOs on company stock prices when information about SEOs are publicized. The number of research on this topic has been increasing with many aspects have been discovered and applied in practice. However, the majority of existing SEOs research are examined at developed market (Eckbo et. al., 2007) while only few research on cases of emerging market are conducted. The paucity of literature and case study in emerging market has drawn attentions from researchers to this market. Therefore, examining emerging economy case attracts the interest to fill the research gap and emphasize the own nature of this market. In additional, examining whether the results of developed markets can be carried over to emerging market also becomes appealing. In addition to examining determinants of company's SEOs decision,

researchers also show that stock prices on the market will be affected when information about the issuance is publicized. In contrast to negative reactions in developed markets, the results of emerging markets are inclusive. While there is a trend of positive reaction in the research of Kim and Lee (1990) for Korea; Salamudin et. al. (1999) for Malaysia; Tan et. al. (2002) for Singapore; Marisetty et. al. (2008) for Indian, the findings of Cahit (2006) for Turkey; Chen et. al. (2007) and Shahid (2010) for China; and Lerskullawat (2011) for Thailand, on the other hand show negative reaction.

## **2. Literature review**

### **2.1 Introduction**

SEOs play significant role on company capital structure as well as stakeholder structure. Theoretical investigations cover main theories regarding SEOs including Trade-off; Agency problem; Growth opportunities; and Market timing. The evidences of these studies are mostly similar in both developed and emerging economies. The organization of this section is as followed:

The main purpose of section 2.2 is to review financial theories regarding SEOs,

### **2.2 Theoretical literature on SEOs**

#### **2.2.1 Trade-off theory**

Study of financial structure has been dominated the research area of corporate finance. Since Modigliani and Miller (1958) first introduce their research on financial structure in the context of capital costs, corporate finance and investment theory, it has drawn enormous attention from researchers to the discussion about the applicability of financial structure theory into reality. The research of Modigliani and Miller has set the very first step of financial theory development in terms of compromising tax system and bankruptcy costs considering then the existence of an optimal ratio of debt suggesting (Ghazouani, 2013)

Trade-off theory is one of the financial theories that have significant impact on company capital structure in the context of corporate and personal taxes effects, bankruptcy costs, etc. According to trade-off theory, company will try to aim at a target debt level to form an optimal capital structure then gradually move towards it. This theory suggests that managers need to make right decision on building financial structure to keep balance as well as optimize the equity and liability in the company. The optimal debt-equity structure in a company can be determined by trading off the costs and benefits of financing through debt and equity. According the trade-off theory, company conducts SEOs to optimize capital structure to balance the benefit and expense that might be generated from debt borrowing (Modigliani and Miller, 1958, 1963; Myers, 1977). This will lead to the existence of a target leverage that maximizes the value of the firm, requiring that any deviation from that target leverage should be adjusted.

Trade-off theory has been testified by some empirical research as one of the theories affect company's SEOs decisions (Marsh, 1982; Hovakimian et. al., 2001; Bo et. al., 2011). Hovakimian et. al., (2001) show that when companies adjust their capital structure, they tend to move toward a target debt ratio that is consistent with theories based on tradeoffs between the costs and benefits of debt. On the other hand, Bo et. al. (2011) investigate the relevance of traditional theories Chinese SEOs motivation. With the case of 1081 Chinese SEOs during 1994–2008, the authors find that the trade-off theory is consistent to Chinese listed companies who strongly depend on loan borrowings from the banking sector because of weak debt market. Borrowing companies are under strictly bank monitoring, which means their main concern is borrowing costs. Furthermore, it is found that Chinese companies pay attention to tax revenue from debt financing. As a result, Chinese companies tend to use SEOs to adjust capital structure for the purpose of balancing costs and benefits of financing by debts.

#### **2.2.2 Growth Opportunities Theory**

The availability of growth opportunities is one of the main reasons encourage companies to issue equity. Company with growth opportunities favors equity financing over debt financing to deter the transferring of wealth from shareholders to debt holders (Myers, 1977). The mechanism of the wealth transfer from shareholders to debt holders exists due to the assumption that company will decide to bypass projects with positive net present value (NPV) if it has to finance those projects by risky debts. When firms finance new projects with debts, shareholders have to bear almost the entire cost in case of projects failure since debt holders own priority claims in the firm assets. Besides, the project success will raise the debt value (Huang, 2012). Furthermore, companies will face future cash flow insecurity, which leads to financial health warning if they invest in high uncertainty growth projects. Therefore, companies with more promising opportunities have more tendencies to issue equity to buffer against any potential financial constraints that might result from debt financing (Bo et. al., 2011).

Jensen (1986) argues that high growth rate companies with better projects will more concern about overinvestment risk than bankruptcy risk, therefore they will choose equity financing as optimal option. On contrary, Jeanneret (2003) states that mature companies who have more free cash flow and capacity of debt borrowing prefer debt financing to monitor and encourage managers' role in company.

Research of Jung (1996); Jeanneret (2003); Elliot et. al (2008); Walker and Yost (2008); Duca (2011); Altı and Sulaeman (2012) show that company uses the proceeds gaining from SEOs to finance for its research and development activities. Besides, company with more profitable projects prefers increasing its financial resources by SEOs to debt to finance for its investment opportunities. Therefore, the existence of those opportunities is one of motivations that encourage company to conduct SEOs.

Bo et.al. (2011) examine SEOs motivation of Chinese companies suggests that although study on Chinese stock market witness no support for investment and growth financing theory, the tendency of profit-oriented and growth stage situation of Chinese companies have revealed the role of this theory on this market.

Besides, growth opportunities theory is also a theory that has strongly impact on market reaction to company's SEOs. Information about prospective projects is seen as good news to investors and can create the trend of stock's price increase on the market. Tan et. al. (2002) shows that returns at Singapore market in the period of the announcement increase significantly. They point out that conducting SEOs conveys positive information about company prospective future, which results in positive market's reaction when the announcement is made available to the market.

McConnell and Muscarella (1985) found that investors react positively to company announcement of capital expenditure plan. Therefore, with the existence of information asymmetry, the market's reaction will respond to the ability of company in signaling the prospective investment projects. In their research, McConnell and Muscarella (1985) record positive reaction of investors toward company announcement on its capital expenditure. Hence, they conclude that in case of information asymmetry existence, market reaction will depend on company ability to signal to the market about the availability of profitable projects. Cooney and Kalay (1993) prove that when the announcement is made available, market would react positively if investors recognize the existence of profitable projects, therefore, stock prices of high growth rate companies with more investment projects are expected to rise when information about SEOs is publicized. Dierken (1991), Pilotte (1992), Jung et. al. (1996) also find evidences to support the theory that the existence of profitable projects will reduce the probability of stock price reduction in the period of SEOs announcement. They apply ratio of market value/book value and find that this ratio has significantly positive correlation with stock returns in the period of right distribution announcement.

Base on company's dividend policy, Pilotte (1992) divides his research sample into value companies group and growth companies group. Companies paying no cash dividend are listed in high growth rate group, in contrast, companies paying high or stable cash dividend are mature company. In the announcement period, these mature

companies witness significant decrease of stock price in comparison to companies in the high growth rate group.

### 2.2.3 Market timing theory

The theory of market timing suggests that the time of stock price overvaluation on the market will encourage managers to issue SEOs instead of other financing methods. This will reduce the cost of companies while bring more benefit to current stakeholders regardless of new shareholders; therefore, SEOs decision will be related to mis-valuation proxies (Elliott et. al., 2008)

According to market timing theory, managers will exploit window of opportunities when information asymmetry is at the lowest level. Korajczyk, Lucas and McDonald (1990) show that information asymmetry among internal and external investors is not fixed, therefore company should choose the time when information asymmetry is at the lowest level or to put it another way, when the market is informed the most. In their research, they find that most of companies conduct their SEOs after information about company earnings are publicized. In addition, the further the time company publicizes information about its activities from the issuance, the worse market reacts to company's SEOs.

Berkovitch and Narayanan (1993) suggest that managers have superior information about stock prices and will choose financing resources base on conditions of the economy. During the favorable time, more external financing is required, company could face lower adverse selection cost, consequently more companies will choose equity financing as they predict better market condition. In addition, the increase of total market capitalization will motivate company to conduct SEOs due to the economic growth rate.

Choe et. al. (1993) find that most SEOs decisions are mostly made in favorable time of the market. They suggest that managers will issue seasoned equity when they find that the market timing is favorable. At this time, stock price is considerably high; therefore, it can reduce the number of equity issued and issuance fees. As the consequence, stock dilution becomes less severe because less right distributions are distributed to outside investors.

There are clusters of SEOs when more growth opportunities available (Bayless and Chaplinsky, 1996). Besides, the existence of opportunity window in the study of Dereeper (2002) in French market show that the aggregate proceeds as well as operation number have determined the concentration of equity issues .

Jeanneret (2003) suggests that when the economy condition is favorable, companies experience more growth opportunities with less probability of failure, which lead to the reduction of overinvestment, agency cost and well as information asymmetry. Managers, in returns are more motivated to issue SEOs in this expansion business cycle.

Choosing market timing affect company's SEOs decision; besides, it also influences company stock price when information about SEOs is publicized.

Pilot researchers, Myers and Majluf (1984) demonstrate that company managers, who are believed to have full information about company situation, are motivated to issue seasoned equity when they find that the company stocks are overvalued. The market, in return, will interpret this action and adjust company stock prices when the information about the issuance is publicized.

Choe et. al. (1993) find that the extent of stock price decrease is smaller when the market is favorable. Their reason is that: in the period of favorable market timing, there are more profitable projects available, investors seem to care less about the fact that company stocks are overvalued, less SEOs will be distributed to outside investors. As the consequence, the extent of stock price decrease in period of favorable market timing is smaller than that in unfavorable timing.

Choosing market timing can help company minimize the possibility of overlooking potential investment projects if it has to finance these projects by selling undervalued equities. Myers and Majluf (1984) point out that when company is seeking external financial resources to finance its potential investment projects, because its current cash flow is not enough and in case the ability to borrow low interest rate loans does not exist, company will decide to bypass these projects. They explain that because of the existence of information asymmetry, conducting SEOs will lead to reduction in stock price when company has to offer equities that are currently undervalued and can harm the interest of current stakeholders. Choosing market timing when company stocks are overvalued lead to negative market reaction once information about SEOs is publicized is also recorded in the research of Slovin (2000), Karbin and Roosenboom (2002), Walker and Yost (2008) and Duca (2011).

Dereeper (2002) investigates the effect of market timing on equity issue announcement in French stock market, however his results show no significant effect during “cold” periods but during the “hot” period, it is significantly negative. The author explains that because the French market is relatively smaller in comparison to other market such as the US or UK, this will lead to difficulties in attracting potential shareholders when the market is “hot”. As a consequence, isolating their SEOs seems to be a better option to attract investor attention.

#### **2.2.4 Agency problem theory:**

Jensen and Meckling (1976) identify the existence of agency problem – the problem derived from conflicts among stakeholders in joint-stock company, caused by differences between property rights and management authorities. These authors claimed that managers, shareholders and creditors have their own purposes. Basically, shareholders expect managers to make decision that bring benefit to shareholders; however, sometimes managers’ priorities are not corresponding to shareholders’ priorities, their own targets may differ from increasing the firm value. Because the purposes of managers are not always corresponding to maximizing the company value, the owners of company may try to monitor and control managers’ behaviors, these monitoring and controlling actions results in agency costs of equity.

In the context of SEOs motivation, agency model predicts that to access to more financial resources for private advantages, managers are encouraged to issue SEOs; besides, they can use SEOs to expropriate the benefits of minority shareholders (Bo et. al., 2011). This model also predicts that equity issues by companies that do not have valuable investment opportunities are bad news to shareholders since they enhance managerial discretion when managers’ objectives differ from shareholders’ objectives (Jung et. al., 1996).

Study on behavior of firms in developed markets mainly focus on managers and shareholders conflicts and company SEOs motivation. The agency problem, among the pecking order and market timing theory which justify company financing decision has more power in explaining company behavior (Jung et al., 1996). Their findings also show that some companies conduct SEOs to profit managers rather than shareholders.

According to agency cost theory, debt plays two important roles. Firstly, debt can reduce the severe differences between possession and management authority. Secondly, debt issuance can create another conflict between shareholders and creditors that could reduce company value on the market. When a lender provides money to a company, the interest rate is formed based on the risk of that company. Shareholders can make decision on company’s investment plans while creditors only earn a certain interest. In case the project is successful, shareholders can gain indefinite profit (Harris and Raviv, 1990), otherwise, when the project failed, creditors will bear the risk of losing their money. To put it another way, managers may tempt to transfer value from creditors to shareholders, therefore the creditors will seek solutions to control the actions of managers, these monitoring and controlling actions result in agency cost of debt.

#### **2.2.5 Efficient Market Hypothesis**

The Efficient Market Hypothesis suggests that stock price will reflect full current information about the value of company, thus it is impossible for investors to achieve returns in excess of average market returns by using that information. This theory refers to a basic issue of financial market considering determinants affect stock price fluctuations and how to measure the mechanism of those changing. The phrase “Market efficiency” first appeared in research of E. F. Fama in 1965. According to the author, in an efficient market, because of fierce competition among investors, when new information is made available to the market, it can immediately lead to market reaction that could affect company’s stock price.

Some investors try to identify undervalued equities and expect their prices to rise in the future. Managers believe they can select potential equities that can generate more profit than average market returns by using highly forecasting-techniques or price-evaluation methods to support their investment decisions. However, the market efficiency hypothesis states that there is no effective method exist that could help investors successfully defeat the market, to say nothing of the possibility that returns deriving from those highly technique methods cannot excess costs generating from research expenses and trading costs.

The market efficiency hypothesis believes that gaining returns based on forecasting the price fluctuation is difficult and impossible. The mechanism behind stock price increase is the existence of new information. The market is considered efficient when stock price immediately reacts when new information is made available, thus it is impossible for stock price to be too high or too low in comparison to its intrinsic value. Stock price will adjust before investors have time to trade and gain excess returns from new information they have.

The fundamental reason of the existence of market efficiency is the fierce competition among investors when they try to gain excess returns from new information. The ability to detect mis-priced stock enables investors to buy stocks that are currently undervalued in comparison to their core value then sell them to gain excess returns. Many investors, including investment managers are confident about their ability to detect securities that will outperform the market; therefore, they will spend time and efforts seeking opportunities to identify those equities. When there are more investors join the market, the possibility to identify wrongly evaluated stocks is reduced. Some “lucky investors” gain excess returns because they can successfully identify stocks that are currently wrongly evaluated; however, the remaining majority, on the other hand, have to bear costly transaction costs that would likely outweigh the excess returns gained from their trading.

Fama (1970) define three forms of market efficiency identified by the extent of information reflection through stock price. The first form of market efficiency is weak form where current stock price incorporates past information of company, no one can identify mis-priced stocks and beat the market by analyzing company past prices. The second form is Semi-strong form in which current stock price does not only reflect historical information but also publicly available ones that reported in company’s financial statements, or earnings and dividend announcements, changing CEO, etc. If the market is semi-strong efficient, stock price will immediately react to the release of new public information. The last form is strong form in which current stock price fully reflects all existing information of company including public and private information or internal information.

SEOs can be considered new information to the market, the practice of issuing seasoned equity becomes a channel to reflect “intention” of managers. Therefore, researching on market’s reaction when company announces its SEOs can be considered a test of the semi-strong form of market efficiency..

### **3. Research Methodology**

To examine the company’s SEOs motivation, we apply logit/probit model to find the determinants of company motivation to issue SEOs. Based on the interpreted results, we will suggest relevant recommendation for investors and SEOs companies.

To examine the market reaction to company's SEOs, we first apply the Event study method developed by Campbell, Lo and MacKinlay (1997) to study the market reaction around event day, then using random effects and fixed effects model on panel data to investigate determinants of market reaction around event day. Based on Hausman test, we select the appropriate model and interpret results in according to relevant financial theories then point out relevant suggestions for stakeholders

#### 4. Results

Our research sample comprises companies conducting their SEOs as right distributions; or rights accompanied with dividends; or rights accompanied with bonuses; and companies issued their seasoned equity as bonuses or dividends.

The event days include announcement day and ex-right day, which are widely publicized on the media. SEOs companies are classified according to three criteria (market capitalization, issuance method and industry). Capitalization values of the companies are divided into three groups: companies with big, medium and small capitalization values based on standards suggested by The Morning Star. Companies with big market capitalization are the biggest ones whose stock values account for 70% of the market capitalization; medium companies account for the next 20% and the small ones hold the remaining 10%. Times of classifying are 29/12/2006; 28/12/2007; 31/12/2008; 31/12/2009, 31/12/2010, 30/12/2011 and 31/12/2012

Companies issue their SEOs method as right distributions; or rights accompanied with dividends; or rights accompanied with bonuses are grouped in equity rights issues. The other group is equity bonuses or dividends comprises companies issued their SEOs as bonuses or dividends.

The HOSE classification criteria and principles divide listed companies into 12 groups of industry (see <http://www.hsx.org.vn>), and in this research they are re- divided into four groups (exclude group of financial companies): (1) Real estate and construction; (2) Manufacturing industry (mining, processing, electricity production and distribution, natural gas, boiler, steamer and air conditioner; (3) Service (wholesaling, retailing, repair of vehicles and engines, transport, warehousing, accommodating, food and drink supply, communication and information, scientific and professional services); and (4) Agriculture, Fishery and Forestry. 2007 was considered the "brightest" years in HOSE history, VNIndex ended at 927.0 point, increasing 175.2 points from 751.8 point in 2006 before significant decrease to 315.6 in the end of 2008, then followed by fluctuation from 351.6 point to 504.6 point in the period 2009-2013. The highest score of VNIndex was also recorded in 2007. Besides, in this year, the Vietnamese stock exchange was supported by favorable condition of macro economy condition; therefore, listed companies did exploit the market condition to collect money from the issuance when choosing equity rights as method to conduct their SEOs. In 2007, the number of companies conducting SEOs through this method account for 63.54% of total SEOs cases.

In contrast, in other years, when the economy was not that favorable, raising capital encountered difficulties resulting from common market condition, investors less care about the stock market and were not willing to invest more money into stock market, issuing SEOs by equity bonuses or dividends were considered the best choice to attract investors. Therefore, the number of SEOs issuing by this method outweigh the number of SEOs issuing by equity rights. This fact confirms that SEOs companies do choose market timing when making decision on conducting their SEOs.

Table 1: VNIndex and Market capitalization of listed domestic companies (% of GDP) in 2006 - 2013

Year	VNIndex	Market capitalization of listed domestic companies (% of GDP)
2006	751.8	n/ a
2007	927.0	n/ a

2008	315.6	9. 6
2009	494.8	2 5. 0
2010	484.7	2 6. 0
2011	351.6	1 5. 9
2012	413.7	n/ a
2013	504.6	2 3. 4

The majority of SEOs was mainly conducted by small companies, accounting for more than 54% of total issuances. This situation might result from the fact that small companies were in the shortage of needed funds and/or they lack of capability to approach loans from banks, which motivated those companies to raise money by issuing SEOs.

When dividing SEOs conducting companies into 4 different groups, the number of SEOs companies listed in Manufacturing group did outweigh the number of the other groups.

Table 3.2: Classification criteria:

Unit: number of company

	2007	2008	2009	2010	2011	2012	2013	Total
<b>ISSUANCE METHOD</b>								
Equity right	58	15	13	39	13	11	20	<b>169</b>
Equity bonuses or dividends	33	43	45	57	49	48	38	<b>313</b>
<b>MARKET CAPITALIZATION</b>								
Big market capitalization	8	11	7	17	11	8	4	<b>66</b>
Medium market capitalization	13	12	13	28	18	13	16	<b>113</b>
Small capitalization	70	34	39	53	32	37	38	<b>303</b>
<b>INDUSTRY</b>								
Real estate and construction	14	10	12	27	19	17	14	<b>113</b>
Manufacturing industry	47	28	25	41	26	24	31	<b>222</b>
Service	26	19	20	27	17	17	13	<b>139</b>
Agriculture, Fishery and Forestry	4	1	1	1	0	1	0	<b>8</b>
<b>Total</b>	<b>91</b>	<b>58</b>	<b>58</b>	<b>96</b>	<b>62</b>	<b>59</b>	<b>58</b>	<b>482</b>

## 5. Conclusion

Contribution to SEOs literature:

Our research covers different aspects from previous research regarding SEOs area. Firstly, we investigate SEOs using data from Vietnamese market which has not been examined yet. We refer to SEOs literature in both developed and other emerging markets to form the research hypotheses then examine whether the results of those markets can be carried over to Vietnam.

Conducting research on SEOs is mainly based on Event study; its objective is to measure the financial assets value fluctuation, which is resulted from particular event. The number of research applying this method is approximate 565 topics from 1974 to 2000 in top five journals of business and finance (Khotari and Warner, 2006), however the number of studies on SEOs in developing countries is relatively limited. In addition to the

out-of-sample tests, this research also fills the gap and enriches the literature on cases of emerging market where the results are inclusive and very limited, from then to draw an overall picture in comparison to developed markets, which have been widely discovered; therefore the research findings enrich existing literature related to SEOs in Vietnamese market, especially to discover how much Vietnamese stock market can catch up with mature market. This research also examines Vietnamese stock market characteristics, Vietnamese investors and SEOs companies on many aspects: SEOs motivations and market reaction.

In conclusion, regarding the motivations of company's SEOs, it is found that two over four seminal theories are supported: (i) in term of trade-off theory, we find that companies with lower leverage ratio in comparison to average of industry's leverage ratio are more likely to use SEOs to adjust their capital structure. This result is irrelevant to the trade-off theory since we expect companies with higher leverage ratio in comparison to average of industry's leverage ratio have more possibility to use SEOs to reduce leverage; however in case of Vietnamese companies, this result might be explained that companies with lower ratio of leverage relative to industry's average leverage will also have tendency to issue SEOs in order to fill the gap in capital shortage of company. (2) Regarding the growth opportunities theory, our results suggest that companies tend to issue SEOs when they have more growth opportunities, which is consistent with the growth opportunity theory. (3) Regarding the market timing theory, we find that companies experience higher ratio of market value/book value tend to conduct SEOs more. We believe this supports the market timing theory that predicts companies will choose the time when market overvalues their stocks to issue seasoned equity. (4) Regarding agency problem theory, we find no evidence to support decision that SEOs is motivated as a tool to conduct advantage over minority shareholders by controlling shareholders, which is inconsistent with the agency problem theory. Besides the main theories, we also find that smaller companies, companies with higher ratio of total debts/total assets, companies with higher profitability are more likely to conduct SEOs.

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