

**Pre-IPO and Post-IPO firm performance:
Evidence from Thai Listed Companies**

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ABSTRACT

This study aimed to discover pre-IPO and post-IPO firm performance of Thai listed firms in SET during 2009-2013. Ownership structure and venture capitalists were the main two factors influenced the firm performance. The firm performance was measured by ROA, and ROE. The population of this study was 36 listed firms in SET using multiple regression analysis to describe the firm performance, which separated the analysis into two cases: pre-IPO, and post-IPO period, and venture capitalist-backed firm performance. The result shown ownership structure had no significant impact on firm performance and firms with venture capitalist backed would perform better than the non venture capitalist firms in post-IPO.

Keywords: IPO, Ownership Structure, Venture Capitalist, ROA, ROE

INTRODUCTION

Background

Although IPO is widely adopted by many businesses around the globe, firms that have gone public usually suffer from the declined long-run performance (Ritter, 1991). Various studies show ownership dilution as major issue. The decision to go public brings about some issues of the separation of ownership and control. Before the IPO, the firm is owned and controlled by few shareholders, who have big incentives in monitoring managers and managing the firm in desirable direction. While after the implementation of IPO, firm will offer the entrance for outsiders and reduce managers and owners' shares. The owner seems to lose some benefit and motivation in the company management which resulting in the low performance in long run (Brennan and Franks, 1997). However, there would be some incentives asides from gaining more capital which encourage owner to go public regardless of the declined performance afterwards.

Unlike the owner, the venture capitalists enjoy full benefit from IPO. They can gain more reputation from successful IPO registration and if IPO is unsuccessful they are free to exit (Krishnan et al., 2009). In addition, the venture capitalists involvement plays significant role in both Pre-IPO and Post-IPO company performance. In Pre-IPO, venture capitalists generally assist the critical stage of financing and expose the quality of the offering to potential investors. However in Post-IPO, Brown (2005)' studies show no significant change in the performance between venture capitalist-backed and non-venture capitalist-backed firms. In contrast, Gompers et al. (2008) uncovered the benefit of venture capitalist in long term. In addition, previous study on the IPO in western shows no significant effect of venture capital in post-IPO performance. Still, Thailand, the emerging market, just recovers from economic downturn and political crisis may have different context of venture capital. Hence, there is no conclusive evidence for venture capitalists role in firm performance in Thailand.

Objectives

This study is the comparative study between Pre-IPO and Post-IPO firm performance in Thailand through two driving factors: ownership structure, and venture capitalists (VC). It aims to fill the previous research gaps. To begin with, the long run performance of the firm as its owner structure is changed. Although firms can raise immerse capital through IPO, many firms suffered from poor Post-IPO performance due to the shift in ownership and the increase in agency cost. Hence, this study aims to develop more understanding for the tradeoff between the ownership and stock price. Furthermore, this study will clarify the venture capitalist role after the "going public" decision since there is no empirical study for Thailand and there is no conclusive result from other markets.

LITERATURE REVIEW

Initial Public Offering (IPO)

The term of Initial Public Offering or IPO refers to the first sale of company stock to the public. IPOs are normally issued by small or young companies as they aim to access to more capital for their business expansion. However, big companies may also do the IPO in order to trade publicly. There are several criteria for company to be listed in the stock market. Company must be prepared both managerial, and financial aspects to meet rigid requirement (Wasserman, 2010).

In Thailand, Stock Exchange of Thailand (SET) formulates certain qualification for IPO. Financial record, market capitalisation, and share distribution will be intensely audited. In this research, the Pre-IPO period is the preparation stage for firms to be listed. It includes the time firms appoint financial advisor to assist in their business re-structure. According to SET's "Going Public Guide" booklet (2013), the pre-IPO period will take approximately 1-1.5 year. Hence, this research will investigate firm performance accordingly to that period. For Post-IPO, it will refer to the period after firms is successfully listed. Herein, the compositions of firm performance that this research will focus on are ownership structure, and venture capitalists.

Ownership Structure

The empirical evidence on the ownership to IPO performance is not clear. There are positive arguments on this privatisation, which is based on the incentive alignment perspective as it can control the interest of shareholder and minority shareholders. For example, Mitton (2002) reported firms with high concentrated ownership have significantly better stock price performance in East Asian markets. Gomes (2000) also argued that high concentrated ownership could provide a credible commitment from controlling shareholders for not expropriating the interests of minority shareholders by using dynamic stochastic game, and Perfect Bayesian Equilibrium (PBE) theory. With those theories, he found that managers as one of owners could manipulate cash flow, and information given to investor to maintain their own wealth, which had positive impact on firm performance.

For emerging market, most of empirical studies found ownership plays significant role in firm performance. This market has unique characteristics with high degree of information asymmetry, which leads to abnormal positive return in the beginning of IPO and abnormal negative return in long term firm performance. Furthermore, owners has upper hand to align the incentives for managers and shareholders. The level of owner involvement will reduce the conflict between managers and shareholders. Hence, the agency cost will be minimised accordingly (Morck et al., 2000). Still, there were some studies claimed that ownership had

negative relationship with firm performance with entrenchment hypothesis. It argued that high ownership concentration triggered agency problems between controlling and minority shareholders. Large shareholders may divert resources from the firm and minority shareholders to themselves (Claessens et al., 2002). Zhu (2014) investigated IPO in China using Turnover Ratio together with regression model, found the change in ownership concentration is favourable to managerial entrenchment and aids in entrenched controlling shareholders with incentives to expropriate outside minority investors.

Kim et al. (2004) applied descriptive statistic to their empirical study to investigate the relationship between ownership and firm performance in Thailand. They found that in pre-IPO period the ownership had 100 percent positive effect on firm performance. Financial tools such as return on asset (ROA) as the indicator for management efficiency to generate income from their assets, and net present value (NPV) as tool to forecast firm value of future revenue, were used to measure post-IPO performance in term of cash flow. They applied operating returns on earning before interest and tax to total assets ratio (EBIT/TA) to measure the operating performance. Their findings showed another distinct result that firm performance drop significantly after going public. The shift in ownership structure and the separation of owners and managers brought more agency costs to the firm. Therefore, research on the ownership for IPOs in emerging markets is likely to give answer far from conclusive results.

Venture Capitalists

Venture capitalists as professional investors play a major role in the identification of the portfolio firm's intrinsic value. Venture capitalist as large shareholders will closely monitor the firm to reduce agency costs and increase the value of portfolio firms. Compared to companies without venture capitalists support, the earnings quality of venture capitalist-backed IPO companies should be better (Sahlman, 1990).

Florin (2005) found high-potential ventures show that companies generally go through two critical stages of financing before significant growth: the start-up and development efforts, and access large amounts of capital to increase growth. Still, he found no significant impact on firm performance either venture capitalist-backed or non-venture capitalist backed firm. However, this research is based on telecommunication industry and it used ANOVA to analyse venture capitalist as moderate variable. While, Brav and Gompers (1997) found that non venture capitalist-backed IPOs substantially underperforms the benchmarks and venture capitalist-backed IPOs in most years in the S&P 500 Index, the Nasdaq Composite, and value- and equal-weighted NYSE/Amex indexes. Therefore, the characteristic of market and firm will provide the different context of venture capitalists and its effect on firm performance.

Additionally, Krishnan et al. (2009) illustrated venture capitalists reputation as another aspect of venture capitalists effect on firm performance in China. Their studies found venture capitalists reputation had positive relation with firm performance. In pre-IPO stage, venture capitalists reputation promotes good public image and firm portfolio. If IPO is successful, venture capitalists reputation will expand firm opportunities to start more projects. In addition, return on asset (ROA), and market-to-book equity ratio (M/B) has been studied to explain more detail on the post-IPO performance. Their studies showed even two or three years passed, the lead venture capitalists did not sell their stocks and they put more contribution and involvement to firm portfolio to sustain its performance as they invested substantially on the firm. Hence, they concluded their research that firm with venture capitalists-backed will perform better in long run. On the contrary, Bradley et al. (2001) shown opposite result. They implemented abnormal returns and the standardized residual approach to compare firm performance between venture capitalist-backed firms and non-venture capitalists firm during various lock-up periods. They found after the lock-up expiration venture capitalists-backed firm loss 3-4 percent of stock value and non-venture capitalist backed firm loss just a little value in US market. They also found IPO with more than 180 days lock-up period was unaffected by venture capitalist involvement. They could not find evidence from their non-venture capitalists sample. For their venture capitalist-backed sample, post-IPO price performance, and trading volume are associated with the stock movement. Firm with large stock price increase will suffer from the greater loss as they have abnormal high stock trading volume in the period lock-up expiration. It may conclude that the different finding derived from the different characteristics of sample firms. However, those studies above came from other country. There is still no empirical evidence from Thailand.

Return on Asset

Return on asset (ROA) can be defined as the indicator of firm efficiency in generating profit from its total asset. Florin (2005) investigated firm performance between venture capitalist-backed firm and non venture capitalist-backed firms. He found return on asset (ROA) in both types of firm was decreased significant in post-IPO period. Krishnan et al. (2009) discovered the same result of the declined performance in long run still venture capitalist-backed firms are less suffered from poor performance than non venture capitalist-backed firms. Morck et al. (2000), on the other hand, found different result from those researches. They observed 25 countries across the world and found that ROA was increased after the firm gone public. Still, his research was based on the assumption the sample countries had good government. Hence, there is no empirical evidence in less developing countries stock market, which may have unstable political climate.

Return on Equity

Return on equity (ROE) reveals the profit, which generated by the money that shareholder invested. Donaldson (2015) studied the relationship between financial ratio and market capitalisation in IPO in US market. He discovered that post-IPO ROE rose in service and material industries while, the ROE in others industries was dramatically dropped, which highly correlated with poor financial performance. In addition, the empirical research in Indonesia shown the same result that long run ROE was decreased significantly and it had negative impact on firm performance (Irfani, 2014). Pastusiak et al. (2016) also chose ROE as the effective tool to measure firm performance in their research. They too discovered the similar result of decreased ROE in post-IPO.

METHODOLOGY

Population and Sample

Population

This study will investigate the IPO performance of 36 listed companies which include 19 venture capitalist-backed firms, and 17 non venture capitalist-backed firms in Thailand SET from 2009 to 2017 when Thai economy started to recover. These listed companies will represent the majority population since SET is the largest source of the capital market in Thailand. They also include database of the SEC, and company annual report.

Table 1

Total number of listed companies in SET from 2009-2013

Year of Listing	No. of listed firms in SET	Post-IPO performance evaluation period
2009	7	2009-2013
2010	4	2010-2014
2011	4	2011-2015
2012	8	2012-2016
2013	13	2013-2017
Total	36	

Note: Adapted from SET New Listed Companies/Securities Summary. Retrieved from <https://www.set.or.th/set/ipo.do>

Sample Size

This study will collect 6 years of performance: 1 year for pre-IPO and 5 years for post-IPO. Hence, the total sample will equal to $6 \times 36 = 216$ samples in order to study listed companies in SET as a whole. Among 36 listed firms, there are 19 firms

that have venture capitalist as one of shareholders. Henceforth, those 19 firms will be recognised as venture capitalist-backed firms in this study to research the impact of venture capitalist on firm performance. The sample size for this case will be $6 \times 19 = 114$ samples.

Measurement

Independent variables

Two major components: ownership structure, and venture capitalist, are used as the independent variables in this study.

a) Ownership structure (OS) is measured by ratio between the fraction of share owned by the five largest shareholders and the fraction of share owned by outsiders. This information can be found in both SET website and company annual report under the shareholder list category. Demsetz and Lehn (1985) explained the five largest shareholders will either manage the firm themselves or will control over the management to maximise their wealth.

$$\text{OS} = \frac{\text{fraction of share owned by the five largest shareholders}}{\text{fraction of share owned by outsiders}}$$

If the outcome of OS is more than 1, it can indicate firm 'shares are owned by the insiders rather than outsiders.

b) For venture capitalists, venture capitalist equity (VCE) and age (VCA) are used as proxies. Florin (2005) explained venture capitalist equity is the implication of venture capitalist expectation on the certain IPO performance. The larger size of equity they invested the more return they expected. The venture age will represent the experience of venture capitalists, which influence how they invest in the IPO. In addition, VCE in this study refers to the percentage of share owned by venture capitalist which can be found in SET website and VCA refers to the number of year which venture capitalists participate in SET. This information can be found in company website where it states the company history.

$$\text{VCE} = \text{The percentage of share owned by venture capitalist}$$

$$\text{VCA} = \text{The number of year which venture capitalists participate in SET}$$

Dependent variable.

The dependent variable is the firm performance of IPO. It will be measured twice in order to compare the performance in Pre and Post IPO respectively by profitability ratios. Lesakova (2007) stated that profitability ratios are widely accepted as good indicator to measure firm financial performance. The ratios are most useful in term of comparing firm performance with competitors or with previous period. In this

study, the return ratios: return on asset (ROA) and return on equity (ROE) are used as firm performance measurement.

$$\text{ROA} = \text{Net Income} / \text{Total Asset}$$

Herein, net income is the total earning after deduct all expenses, depreciation, and taxes as appear in the company income statement. Total asset includes company current assets and non-current asset, which can be found in the company balance sheet. ROA measures how effectively a firm can generate return on its investment in assets. In other words, ROA indicates how efficiently a firm can transform the money spent on assets into net income or profits. The higher ROA is obviously the more favourable for investors.

$$\text{ROE} = \text{Net Income} / \text{Total Shareholder's Equity}$$

The net income refers to the total earning after deduct all expenses, depreciation, and taxes as appear in the company income statement. Total shareholder's equity consists of company share capital and retained earning, which can be found in the company balance sheet. ROE measures how efficiently a firm utilise shareholder's money to generate profits and firm growth. ROE represent the profitability from the investor perspectives. Obviously, this ratio is computed based on investors' investment solely.

Categorical Variable

This study uses dichotomous dummy variable as categorical variable to separate the case study into two groups: pre-IPO, and post-IPO by coding pre-IPO as 0 and post-IPO as 1.

Instrument and Data Analysis

The research is conducted under comparative and correlation methods through the document and data review together with the analysis.

Descriptive Statistic

In this study, the descriptive statistic will used to compare the pre and post IPO performance by retrieving the secondary data from SET, and company's annual report. It will also explain the trend using the basic tools: minimum, maximum, mean, and standard deviation.

Multiple Regression Analysis

As there are two independent variables in this research, multiple regression analysis will help the research to answer research question about how ownership structure and venture capitalist affect firm performance. Herein, the analysis is

separated into two cases: pre-IPO, and post-IPO period, and venture capitalist-backed firm performance

Pre-IPO and post-IPO firm performance Analysis

$$ROA = a + b_1*OS + b_2*VCE + b_3*VCA + \text{Period} + e$$

$$ROE = a + b_1*OS + b_2*VCE + b_3*VCA + \text{Period} + e$$

Venture capitalist-backed firms performance Analysis

$$ROA_{vc} = a + b_1*OS + b_2*VCE + b_3*VCA + \text{Period} + e$$

$$ROE_{vc} = a + b_1*OS + b_2*VCE + b_3*VCA + \text{Period} + e$$

Where:

ROA = Return on asset for pre-IPO and post-IPO

ROE = Return on equity for pre-IPO and post-IPO

ROA_{vc} = Return on asset for venture capitalist-backed firms

ROE_{vc} = Return on equity for venture capitalist-backed firms

a = Constant value

b = Coefficient

OS = Ownership structure

VCE = Venture capitalist equity

VCA = Venture capitalist age

Period = Period which IPO is in using dichotomous coding 0 = Pre-IPO, 1 = Post-IPO

e = Error term

RESULTS

The result in this study is set into two main sections: all samples in both pre-IPO and post-IPO result and the separated venture capitalist-backed firms result.

Pre-IPO and Post-IPO firm performance

With the multiple regression analysis under the significant level of 0.05, 216 samples show only VCE and ROI have significant impact on ROA. VCE has negative significant effect on firm performance. On the other hand, ROI shows strong positive significance. In addition, only ROI has significant impact on ROE. In post-IPO, both ROA and ROE tend to decrease.

Venture capitalist-backed firm performance

With the multiple regression analysis under the significant level of 0.05, 114 samples reflect the same result as 216 samples that ROI has significant impact on ROA and ROE. VCE has positive significant impact on ROA. In summary, ROA will rise in post-IPO. On the contrary, ROE will drop in post-IPO.

DISCUSSION

Ownership structure impact on pre-IPO and post-IPO firm performance

This study found ownership structure has no significant correlation with ROA, and ROE which are the firm performance indicator. This result contradicted with several previous studies. For example, Morck et al.(2000) stated that the lower ownership concentration in Post-IPO were beneficial to firm performance as it reduced the agency cost. Zhu (2014) also found the ownership structure aid in controlling shareholders with incentives to expropriate outside minority investors.

However, Tsegba and Achua (2011) discovered the same result as in this study. They conducted research in Nigerian market and concluded the ownership structure had no significant relationship with firm performance due to the government policy and corporate structure in Nigeria where owner was monitored closely by shareholders. From my point of view, the non-significant relation may imply the ownership structure was not change significantly in Thai market. According to the data from SET, most of sample in this study had proportion between the major shareholders and outsider was high. It reflected that even after going public, most of the share still owned and controlled by owner. Hence, the ownership structure did not change significantly.

Venture capitalists impact on pre-IPO and post-IPO firm performance

According to the result, venture capitalist had significant relationship with firm performance. In pre-IPO, VCE will generate both ROA and ROE more than the post-IPO as shown in the result. Regardless of the increase in VCE will decrease firm performance, firm with venture capitalist perform slightly better than non venture capitalist-backed firm. This result is supported by previous studies. Sahlman, (1990) found firms with venture capitalist performed better as the large shareholder like venture capitalists would monitor their performance closely. From my perspective, VCE reflects how much venture capitalists expect from particular stock. Each percentage of equity they invested is carefully monitored to maximise their own profit. Hence, they keep firm perform well. In addition, from SET information most of venture capitalists in Thailand are investment banks, which share similar characteristic of investment behaviour that may result in the non-significant impact of VCA regardless of the difference in age.

The declined performance in post-IPO

According to the result, both ROA and ROE fall in the post-IPO. Ritter (1991) found the similar result on his studies in US market that firms were generally underperform in post-IPO. He explained this situation as lack of long-term return vision. Firms were drove by investors who were too optimistic on future returns. In addition, Brav and Gomper (1997) did the further studies in this issue. They discussed

either non venture capitalist-backed firms or venture capitalist-backed firms would underperform in the first five year after going public. They explained each firm had specific capital allocation. The change in cost of capital of how they made investment would negatively impact firm performance. Thailand where the degree in information symmetry is high, suffer from misperception of investors. Investors make the stock overvalued which reduce the quality of the offering. Massive return on the first day comes from the overvalued excessive demand that firm will face declined performance subsequently (Aumeboonsuke, 2012). Finally, as Royal Thai Embassy (2009) stated in the period of this study (2009-2013) was the period when Thailand recovered from economics downturn, author thinks most of firms may try to access to large fund for long term project as they saw a good opportunity to grow. Thus, such long term may require ample of time to generate profit, which result in the underperformance in the first five years in post-IPO.

5.3 Limitation and recommendation for the future study

This study only observes firms in SET, which may have limited sample size. For the future study, applying sample from MAI may broaden result of the study. In addition, MAI consists of small and medium enterprises, which attract more venture capitalist to invest there. This may provide more understanding on the venture capitalist role in IPO. Furthermore, this study analyses SET as a whole. Separately observing in each industry is recommended for in-depth study. Ultimately, the cryptocurrency such as Bitcoin become popular among investor nowadays. Initial Coin Offering (ICO) is introduced to find new source of the limited cryptocurrency. The future study may apply or adapt the concept of IPO to study ICO.

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