

Detecting the Probability to Conduct First Seasoned Equity Offerings in Indonesia Capital Market

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Abstract:

This study aims to examine the factors surrounding the IPO that affect the probability of First Seasoned Equity Offerings (FiSEO). Tests were conducted to prove whether the probability of FiSEO influenced by the first trading day stock return in accordance with the signaling theory. Examination was done using logistic regression, with a cut-off based on the median years of conducting FiSEO (3 years). Companies that do FiSEO equal to or less than 3 years were given a score of 1 and the others were 0. The number of samples was 128 public companies in the Indonesian capital market from 1990 to 2013. The results show that the first trading day stock return measured by market adjusted initial return had significant negative effect on the probability of FiSEO. This shows the higher the money left on the table the smaller the probability of FiSEO less than 3 years, due to the good quality companies tend to do FiSEO over 3 years. These results are consistent with signaling theory (Welch, 1996), that stated the better the quality of the company, the greater the level of underpricing, and the longer the return to capital markets for FiSEO. Also assessed the effect of profitability and firm age on the probability of FiSEO as proxy for other theories other than the signaling theory.

Keywords: IPO, first seasoned equity offerings, market adjusted initial return

I. INTRODUCTION

Sequential financing is a type of corporate action of public companies to conduct further fund raising from the capital market through the issuance of a variety of long-term securities. According to sequential financing theory, in the period before the IPO, firm plan the entire needs of their investment funds. A small part of the funding requirements will be raised through the IPO mechanism, the rest needs further funds collected through the mechanism of seasoned offerings (Allen et al., 1989). In order to further capital accumulation can be done successfully, it is necessary for the company to disclose its quality to the market. According to Welch (1989), underpricing is a mechanism whereby a good quality company sends a signal to the market about its quality. Welch (1989) and Chemmanur (1993) stated that through underpricing issuers try to give a positive signal, and the cost for the provision of this signal will be compensated through a search subsequent capital (subsequent capital issue) which will be set at a higher price. IPO underpricing hence can be used as an indication of the company's policy to re-raise funds from the capital market. Supports the signaling hypothesis, Jegadeesh et al., (1993) concluded that there was a positive relationship between underpricing IPO with probability and volume subsequent offering security. Bommel and Vermaelen (2003) showed intervals from the time of the IPO to a second equity offering shorter with a higher level of underpricing of IPO shares. Garfinkel (1993), Spiess and Pettway (1997) did not support the signaling hypothesis, declared the opposite, that underpricing is not related to signal and has no effect on the probability of SEO. This is due to, the high IPO underpricing is not followed by an increase in the offer price of SEO, so either IPO or SEO showed no difference in proceeds for the initial owner.

This study was conducted to confirm whether the signaling theory is able to explain the probability of FiSEO in Indonesian Capital Market. Previous research conducted on the capital markets of developed countries, which have different characteristics with the capital markets in emerging countries as in Indonesian capital market.

II. LITERATURE REVIEW

IPO is the first step for the company to enter the capital market by selling some of its shares to the public. Being a public company will increase the firms access to raise funds from the capital market either by issuing new shares, bonds or hybrid financing such as convertible bonds, shares with warrant and so on. The results of research in many global capital markets, including Indonesia showed the phenomenon of underpricing or the occurrence of a positive initial return at the time of IPO, as the research results Ibbotson (1975); Rock (1986); TINIC (1988); Aggarwal and Hernandez (1993); Carter and Manaster (1990); Ritter (1991) in the United States capital markets; Levis (1993) in the UK; Kunz and Aggarwal (1994) in Switzerland; Durukan (2002) in Turkey, Reber and Fong (2006) in Singapore, Ahmad et al. (2007) in Malaysia, Alok and Vaidyanathan (2009) in India, and Meidiaswati (2008); Gumanti and Alkaf (2011) in Indonesia.

IPOs underpricing will lead to losses for issuers because of the "money left on the table" that led to the company's goal to get huge funds from the IPO is not achieved optimally. It is indicated that the issuer considers underpricing as the cost of going public or charges to obtain further funds from the capital market through subsequent

equity offerings as well as through debt by issuing bonds or even hybrid finance Hertz et al. (2012). According to Jenkinson (1990) discounted IPO prices will leave a pleasant impression for investors (left a good taste in investor's mouth). Furthermore, the company will increase funding with equity (stock) in the future. This is supported by the finding that many companies acknowledge that the funds raised during the IPO is not sufficient to fund the expected investment in the future, therefore, is anticipated to return to the capital markets (hertz et al., 2012). This reason makes staging (sequential financing), despite the increasing cost of emissions, is a central decision when the company decided IPO.

There are at least three groups of market participants that affect IPOs underpricing, that are issuers, investors and underwriters (Brau and Fawcett (2006). Information asymmetry can occur in each of these groups caused by differences in the information held. The superiority of one party is in possession of information than the other causes different levels of underpricing of IPO shares. Signaling theory assumes that managers have more complete and accurate information on the value and the factors that affect the value of the company, which is unknown to the outsiders (Morse, 1981). Allen and Faulhaber (1989) stated that firm manager with the level of expectations of good profits will attempt to show the better quality of his company by underpricing. The offer price is set as low as it can be accepted by external investors as a trusted signal about the quality of the companies, since not all companies can afford to pay the cost of underpricing, Empirical implications of the study by Allen and Faulhaber (1989) is a company that uses underpricing as a signal to show the quality of it will only sell a small portion of its shares at the time of the IPO. This is done to avoid underpricing costs being too high. Welch (1989) has predicted that the IPO underpricing related with the trend of companies doing seasoned equity offerings. Further study by Jegadeesh et al. (1993) concluded that there is a positive relationship between the IPO date returns the probability of the company doing the first seasoner equity offerings within three years after the IPO date with the larger value of funds raised.

III. RESEARCH METHOD

This research uses explanatory approach to examine whether first day trading return of stock affect the probability of FiSEO as predicted by signaling theory of Jegadeesh et al. (1993); Allen and Faulhaber (1989), Chemmanur (1993), Grinblatt and Hwang (1989), Welch (1989;1996). Testing was done using secondary data from the Indonesia Stock Exchange website, the website of Britama, Indonesian Capital Market Eletronic Library (ICaMEL), and the FSA (Otoritas Jasa Keuangan). The research sample was taken from non-financial companies that conducted IPO in Indonesian Stock Exchange period 1990 to 2013 and did FiSEO, with the observation period 1990 to 2015. Samples were taken with the following criteria:

1. Firms in the period of observation did First Seasoned Equity Offering (FiSEO) with pre-emptive rights. FiSEO without preemptive rights are not sampled because it is not offered to the public.
2. Consistently, the company listed in the Indonesian capital market according to industry category, during the study period.
3. The Company did not undertake any other corporate action until 40 days after the IPO.
4. Disclosed financial statements ending December 31 each year.
5. Financial data and other necessary data appropriate research purposes were available.

Through purposive sampling technique by considering the sample criteria outlined in accordance with the purpose of research, it obtained a sample of 128 companies with the following explanation:

Table 1. Sample Construction

Num	Items	Number of Listed Companies
1	Number of IPOs Companies 1990-2013	424
2	Financial Companies	(50)
3	Not Conducting FiSEO	(198)
4	FiSEO without Preemptive Rights	(28)
5	Not Consistently Listed	(2)
6	Performed Corporate Action, Incomplete Data	(18)
	Sampled	128

Tests have been conducted with logistic regression by giving a score of 1 to companies that do FiSEO below the median (≤ 3 years) and a 0 if it is more. Tests conducted with variations in size and the first day of earnings after market return. The stock's first day trading return was measured by absolute return (initial return/IR) and market adjusted return (market adjusted initial return/MAIR). IR defined as the difference between the closing price of the first trading day and the IPOs price. MAIR calculated by adjusting Initial Return to market return on the first day trading of IPO stock. After-market return of 20 days and 40 days after the IPO is the market adjusted abnormal return over the period from the trading day 1 to day 20 trading after the IPO date and measured by cummmulative abnormal return (CAR) and Buy-and-Hold Abnormal Return (BHAR).

After market return measured over the period after the IPO date that are between trading days 1 to 20 for AFTR20, and between trading days 21 to 40 for AFTR40. CAR was calculated by summing the abnormal return of stock during 20 and 40 days post IPO period. The abnormal return is estimated as the raw return minus market return at the same time. Stock's buy-and-hold returns, was calculated by multiplying one plus the stock returns over a period of 20 days and 40 days after the IPO date and subtracted it by 1. Buy-and-hold abnormal return is the result of subtraction of stock's BHR with market's. This study used JCI as the market return. ROA as a proxy for the profitability measured by total income divided by total assets based on firm's pre-FiSEO financial statement. Age was measured from the time the company established up to go public.

IV. EMPIRICAL RESULT

Capital market in emerging countries has some uniqueness that distinguishes it from advanced market (ie the capital markets in developed countries) such as: its association with the condition of the country, the historical volatility of monetary conditions, the financial system, politics and law, and corporate governance. People in the country with a history of low incomes tend to have limitations in saving and investment, including in understanding the advantages and disadvantages of investing in the stock market. This led to capital market activity in the emerging markets are not as enormous as in the advanced markets. In emerging markets, the issue of corporate governance is a matter of concern to investors. The dominance of the government or a family company that has a particular political affiliation, as well as the complexity of the organizational structure allow a large information gap between companies and investors. This is exacerbated by the fact that the emerging market investors face challenges in the evaluation due to availability of information about companies and markets.

Indonesian capital market are classified as emerging market also has a unique characteristics related to the small number of issuers or companies that go public and the least number of investors when compared with the large number of its people. By the end of December 2015 Indonesian Central Securities Depository (KSEI) records the number of investors in the capital market as much as 433 607. This number is very small compared with the total population of Indonesia reached 255 million in the same period, or about 0.17% of the total population of Indonesia. The small number of Indonesian capital market investors resulted in capital markets transaction activity is dominated by foreign investors. Foreign investors in the Indonesian capital market as in other emerging market is still dominated by the number reaches 55%. BEI recorded a number of individual local investors reached 174 thousand in January 2015, or under one percent of the total population of Indonesia. Number of local investors Indonesian capital market 45% of the total number of investors, 83% of whom are institutional investors. The small number of investors in Indonesia is due to low investment culture.

The uniqueness characteristics of the Indonesian capital market, as an emerging market, is also demonstrated by several things, such as: market capitalization, number of shares traded and the number of issuers. Indonesia's capital market capitalization is still small compared to the capital markets of developed countries even compared to some emerging market countries of ASEAN, as shown in the following table:

Table 2 Stock Market Comparison

Negara	Market capitalization				Market liquidity		Turnover ratio		Listed domestic companies number		Gross domestic product		Value of shares traded
					Value of shares traded		Value of shares traded						
	\$ millions		% of GDP		% of GDP		% of market capitalization				\$ billions		\$ millions
	2005	2014	2005	2014	2005	2014	2005	2014	2005	2014	2000	2014	2014
Emerging Market													
Indonesia	81.428	422.127	29	48	10	10	25	24	336	506	165	888,5	99.622
Malaysia	180.518	459.004	126	136	32	42	25	30	1.015	895	93,8	338,1	137.242
Philippines	39.799	261.841	39	92	5	15	16	18	235	260	81	284,8	46.084
Thailand	123.885	430.427	65	106	47	77	75	79	504	613	126,4	404,8	340.898
India	553.074	1.558.300	66	76	56	36	99	54	4.763	5.541	476,6	2048,5	844.599
Argentina	4.759	60.142	22	11	3	1	15	8	100	95	284,2	537,7	4.992
Developed Market													
Singapore	25.734	752.831	202	245	92	65	49	27	564	484	95,8	307,9	201.759
China	401.852	6.004.948	18	58	17	116	92	240	1.377	2.613	1205,3	10354,8	14.429.890
Hong Kong SAR, China	1.054.999	3.233.031	581	1.111	232	523	44	48	1.126	1.661	171,7	290,9	1.551.855
Japan	4.572.901	4.377.994	100	95	95	105	107	109	2.323	3.458	4731,2	4601,5	4.754.501
United States	17.000.864	26.330.589	130	151	211	237	166	164	5.145	4.369	10284,8	17419	43.155.835
Australia	804.015	1.288.708	116	89	93	51	82	55	1.643	1.967	415	1454,7	713.944
World	40.641.715	66.505.565	93	95	107	108	120	116	39.434	44.086	33291,7	77845,1	77.146.455
Low & middle income	3.095.422	12.891.503	41	58	23	71	60	134	14.257	14.399	5276,6	25063,1	17.210.157
High income	37.546.293	53.614.063	104	112	124	124	125	112	25.177	29.687	28011,9	52812,6	60.208.593

World Development Indicators 2015, THE WORLD BANK

Indonesia stock market capitalization value in 2014 was USD 422.127 billion while, in the same year, Malaysia (USD 459.004 billion), Thailand (USD 430.427 billion) and the Philippines (USD 261.841 billion). Even if it is associated with GDP, the value of stock market capitalization of Indonesia is much smaller at only 48% of GDP. This value is far below the Malaysian capital market, which reached 136%, 106% Thailand, and the Philippines 92% (World Bank, 2015). The transaction value of shares in the Indonesian capital market is only around USD 99.622 billion in 2014, much lower than Malaysia (USD 137.242 billion), and Thailand (USD 340.898 billion) and only higher than the Philippines (USD 46.084 billion). Indonesian capital market conditions can be said to have much different characteristics from the conditions of the capital markets where research FiSEO ever done. These differences may lead to some differences such as the duration of FiSEO execution and number of companies that do FiSEO.

We test the hypothesis that the probability of a firm's first seasoned equity offering (PROBSEO) is related to IPO underpricing (UNDP), aftermarket returns (AFTR), profitability (ROA), and lifecycle proxy (AGE) by estimating the following logit model:

$$PROBSEO_i = \beta_0 + \beta_1 UNDP_i + \beta_2 AFTR20_i + \beta_3 AFTR40_i + \beta_4 ROA_i + \beta_5 AGE_i + \varepsilon_i$$

where *PROBSEO_i* is the probability that the firm conduct FiSEO in 3 years after the IPO date. The five independent variables of primary interest are the IPO underpricing (UNDP), measured by initial return (IR) dan market adjusted initial return (MAIR); the abnormal aftermarket returns in the two 20-day periods after the IPO measured CAR dan BHAR (CAR20 and CAR40 or BHAR20 and BHAR40), pre-FiSEO firm's profitability (ROA), and firm's age at the time of IPO (AGE).

Table 3. Correlation Matrix

	IR	MAIR	CAR20	CAR40	BHAR20	BHAR40	ROA	AGE	PROBSEO
IR	1,000								
MAIR	0,562 ** (0,000)	1,000							
CAR20	0,843 ** (0,000)	0,595 ** (0,000)	1,000						
CAR40	0,279 ** -0,001 (0,825)	-0,020 (0,825)	0,077 (0,387)	1,000					
BHAR20	0,610 ** (0,000)	0,642 ** (0,000)	0,756 ** (0,000)	0,024 (0,788)	1,000				
BHAR40	-0,142 (0,109)	0,186 * (0,035)	-0,111 (0,213)	0,375 ** (0,000)	-0,096 (0,283)	1,000			
ROA	-0,039 (0,662)	-0,051 (0,571)	-0,068 (0,448)	-0,082 (0,359)	-0,095 (0,286)	0,009 (0,923)	1,000		
AGE	-0,146 (0,100)	-0,059 (0,506)	-0,140 (0,114)	-0,097 (0,274)	-0,145 (0,104)	-0,010 (0,914)	0,086 (0,334)	1,000	
PROBSEO	-0,036 (0,689)	-0,172 (0,051)	-0,048 (0,590)	0,083 (0,351)	-0,071 (0,429)	-0,016 (0,857)	-0,167 (0,060)	-0,173 (0,050)	1,000

*) significant at 10 percent level

***) significant at 5 percent level

Table 3 shows the correlation matrix of the study variables. There were significant correlations between the probability of doing FiSEO with MAIR, ROA, and AGE. Correlation between IR and MAIR with CAR and Bhar indicated that IPO price adjustment process was still continued to forty after the IPO date. This condition is thought to occur because the Indonesian capital market efficiency is quite low and and lead to long lag in the realization of the value of the company.

Table 4 presents the results of logit regression estimation. Estimated results of the test are shown using different variables. Column 1 is testing with IR for the IPO underpricing and CAR for after-market returns. The results show that the company's profitability and age significantly affect the probability FiSEO. Column 2 is testing with IR for the IPO underpricing and BHAR for after-market returns. The results are consistent with tests in column 1, namely profitability and firm age significantly affect the probability FiSEO. Both of these results indicate that the signaling theory proxied by the initial return can not explain the probability of doing quick FiSEO.

Table 4

Logit regression estimates of the relation between stock returns at fist day trading of IPOs and the probability of a first subsequent quity offering" (FiSEO) for 128 firm-commitment IPOs in the 1990- 2013 period. The dependent variable is a dummy that is assigned a value of one if a firm issues FiSEO within three years of its IPO and zero otherwise. The independent variables are IPO underpricing (*IR and MAIR*), the abnormal aftermarket returns in

the two 20 day periods after the IPO (CAR20, CAR40 and BHAR20, BHAR40), age of IPO firm (AGE) and profitability (ROA). The t-statistics are reported in parentheses below the corresponding estimates.

Variabel	IR-CAR	IR-BHAR	MAIR-CAR	MAIR-BHAR
IR	-4,9.10 ⁻⁴ (-0,232)	-2,9.10 ⁻⁵ (-0,022)		
MAIR			-0,002 ** (-1,989)	-0,002 * (-1,803)
CAR20	-4,9.10 ⁻⁴ (-0,304)		3,9.10 ⁻⁴ (0,389)	
CAR40	0,002 (0,726)		0,001 (0,539)	
BHAR20		-0,001 (-1,008)		2,1.10 ⁻⁴ (0,256)
BHAR40		-0,001 (-0,311)		0,001 (0,290)
ROA	-0,01 * (-1,717)	-0,010 * (-1,841)	-0,010 * (-1,808)	-0,010 * (-1,848)
AGE	-0,006 * (-1,875)	-0,006 ** (-1,983)	-0,006 * (-1,850)	-0,006 * (-1,914)
R²	6,40%	6,60%	9,30%	9,00%

*) indicates statistical significant at 10 percent level

**) indicates statistical significant at 5 percent level

In column 3, testing is done by MAIR for IPO underpricing and CAR for after-market returns, while in column 4 testing performed by MAIR for IPO underpricing and BHAR for after-market returns. The test results in columns 3 and 4 show MAIR significantly have negative effect on the probability FiSEO. These results indicate that the IPO underpricing can be used to describe the probability FiSEO, when measured by MAIR. In this study, the theory of signal is best explained by MAIR. The First day trading return will better reflect the true value if adjusted with market return. Adjustment of stock return to market's at the same time, can produce the best estimator in estimating return. This study shows that the higher the money left on the table the smaller the probability FiSEO less than 3 years. These test results may be due to the good quality companies tend to FiSEO over 3 years. These result are consistent with signaling theory; a company with good quality can wait longer to refinancing. ROA negatively effect the probability of FiSEO. The test results, which are consistent in different variations of this, indicating that with the higher profitability of the company's dependence on internal sources of funds is also getting bigger. Effect of Age on the probability of FiSEO is negative on the various tests. These results are consistent with lifecycle theory in which mature companies are increasingly less likely to collect funds in the form of new equity, as companies rely more on retained earnings.

V. CONCLUSION

Various papers by Jegadeesh, et.al (1993) Allen and Faulhaber (1989), Chemmanur (1993), Grinblatt and Hwang (1989), and Welch (1989, 1986) propose signaling models in which issuers convey their private information about the value of their projects by underpricing their IPOs. This model imply that firms with large IPO underpricing are more likely to issue seasoned equity subsequently. We find that firms that experience relatively higher first day trading returns, are less likely to conduct FiSEO within three years of their IPOs' date. In this study, we found that MAIR better able to reflect the influence of first day trading return. This study showed that MAIR have negative significant effect on the probability of FiSEO. This result indicate that the higher the money left on the table the smaller the probability of companies do FiSEO less than 3 years. This means that in Indonesian Capital Market good quality firm tend to issue FiSEO more than three years.

ROA as a proxy for profitability negatively affect the probability FiSEO. These results indicate that the higher profitability of the company the greater reliance on internal funding sources. The results of this study are consistent with the pecking order theory; company which is able to generate more profits tend to choose internal funding sources compared to external funding sources. Age negatively affect FiSEO speed. These results are consistent with lifecycle theory; the more mature companies the less likely for it to collect funds in the form of new equity. Mature companies will rely more on retained earnings.

We also find that the market returns in the two 20 day periods immediately following the IPOs are not significantly related to the probabilities of FiSEO. These results indicate that the return on the date of the IPO can use to predicting future seasoned equity offerings. This evidence supported the basic implication of the signaling hypothesis, that issuers uses underpricing mechanism to signal to the market information relevant for future equity issues. This finding give more evidence documented that support for the signaling hypothesis. Further research can be done to test another theory, besides signaling, related to IPO underpricing and the probability FiSEO.

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