# Short Term IPO Returns in Stock Exchange of Thailand: The Study in 2003-2013

# Marisa Laokulrach

*Abstract*—This study examines the short term performance of initial public offering (IPO) in capital market of Thailand from 2003-2013. The daily price data is used in this study to identify the short term returns of IPO of the first trading day until the day that abnormal return cannot be earned. The results confirm the abnormal returns of the first trading day of IPO and also identify that their outperformance returns remain until day 246 after the market. IPO of four industries which are financial, service, resources, and technology outperform the market, while the other four industries which are agro and food, consumer products, industrials, and property and construction do not provide significant abnormal returns.

*Index Terms*—Abnormal returns, first trading day return, IPO, stock exchange of Thailand (SET).

#### I. INTRODUCTION

Issuing stocks is an importance source of funds for corporations in their expansion. A pricing process rewards the well-managed firms to have greater allocation of new investment resources.

Stock exchange of Thailand (SET), the equity market in Thailand has become an important tool for raising funds for private companies after the Asian financial crisis in 1997. Since 1997, market capitalization increased from 1,200 billion baht to about 10,000 billion baht in 2012 in which the major issuers of equities are in the eight diversified business sectors [1].

Thailand is also a part of Asian economic community (AEC) which has ASEAN Exchanges plan. ASEAN Exchange is the collaboration from Indonesia, Malaysia, Philippines, Singapore, Thailand and Vietnam. The collaboration aims to promote the growth of the ASEAN capital market by streamlining ASEAN access, introducing cross-border harmonization and creating ASEAN centric products. The ASEAN Exchanges collaboration will bring greater investment opportunities to more people as well as bring greater liquidity tocollaboration members. This collaboration aims to expand opportunities for fund raising channel [1]. SET is considered as a growing emerging capital market. In 2013, the market capitalization of initial public offerings in SET reached the highest level in ASEAN [2].

There are different studies on initial public offering (IPO) returns in both long term and short term prospect. The studies in developed markets indicate that IPO outperform the market in short term but underperform the market in long term. There are limited numbers of this study in Thailand

Manuscript received December 5, 2014; revised February 7, 2015.

especially for short term performance of IPO.

This study is interested in measuring the first trading day returns and also short term performance of IPO stocks in Thailand's equity market. The returns of all IPO stocks in the whole market, and also of each industry are studied. While most research to date studied the monthly return up to the long term returns of IPO, this paper will examine the abnormal return of IPO over the short time horizon using daily data.

It is hypothesized that the abnormal returns of IPO are significantly higher than zero for short time horizon. This study examines the return of IPO relative to the market return to represent its abnormal return. The holding period after the listing since the first trading day up to 360 days are indicated. Then t-test statistic is used to test if the abnormal return is higher than zero significantly. The study covers 153 listing stocks from 2003-2013.

This study aims to provide useful insights of IPO performance in Thailand's equity market, and also to identify the efficiency of SET in terms of price movement aftermarket. The results will benefit both individual and institutional investor to manage their portfolio returns.

Author also expects the result to increase the numbers of listing in capital market to be the important sources of funds for private sector.

### II. STOCK EXCHANGE OF THAILAND

From the information of the stock exchange of Thailand (SET), it has been started the operations on April 30, 1975. It operates mandatory to be a market or center for the trading of listed securities, and promoting of financial planning, as well as providing related services connected to such activities, without providing any profits to members. The main operations of SET include listing of securities, supervising of listed companies and disclosing of information, trading, and supervising members, disseminating information, and educating investor [1].

SET Index is a composite index representing the price movement for all common stocks trading on the SET. The market capitalization-weight index method is applied which the base day of April 30, 1975. SET Index is calculated from the prices of all common stocks on the main trading board. The SET also provides industry group indexes and sectoral indexes. There are eight industries in the Stock Exchange of Thailand including agro and food, consumer products, financials, industrials, resources, services, property and construction, and technology [1].

The stock market in Thailand has become an important source of funds for private firms after the Asian financial crisis in 1997. Since 1997, market capitalization increased

Marisa Laokulrach is with the Finance and Banking Department, Martin de Tours School of Management and Economics, Assumption University, Thailand (e-mail:marisalkl@au.edu).

from 1,200 billion baht to about 10,000 billion baht in 2012 in which the major issuers of equities are in the more diversified business sectors [1]. In 2013, there are 489 listed companies in SET. A company must apply and comply Security and Exchange Commission (SEC)'s requirements to be listed and able to trade its stocks [1], [2].

There are increasing numbers of IPO in SET after the economic crisis in 1997-2000, especially in 2003-2005 of economic expansion with 85 listing stocks. The number of IPO declined in year 2006-2011 as the results of global economic crisis. New listing stocks have increased since 2012.

In year 2013, the average daily trading value of SET surged to an all-time high and the highest level among ASEAN countries. The market capitalization of initial public offering (IPO) reached SET's record high at THB 346,506 million (USD 10,557 million), the highest level among regional stock markets. This was caused by the launch of the BTSGIF infrastructure fund of THB 62,510 million (USD 1,904 million), the largest IPO in ASEAN [2].

#### **III. LITERATURE REVIEW**

Numerous of international studies conclude that IPO introduce the underpricing and provide high initial returns on the first trading day. Kunz and Aggrawal [3] in 1994 found 35.8 percent average initial return in equity market in Switzerland. Ibbotson, Sindelar, and Ritter in 1994 found the 15.8 percent average return of IPO of the first trading day [4].

The studies also confirm the short term outperformance the market of IPO. IPO price performance in United State showed the significant positive buy-and-hold abnormal return from trading day 17 until day 120, and the abnormal return reached negative on trading day 201-750 [5]. Ritter in 1991 found the 3 year holding period return of IPO was underperformed relative to the matched portfolio listed on American and New York stock exchanges [6]. Aggarwal and Rivoli in 1990 found that the short term abnormal return of IPO in New York Stock Exchange were 10.7%, and the returns were starting to reduce after the first year [7]. IPO in Istanbul Stock Market also generated the short term abnormal return, and low long term returns. The study of IPO in Istanbul Stock Exchange by Kaya in year 2011 showed the abnormal return only at the end of third trading day [8].

The study of Alvarez, and Gonzalez in Spanish IPO revealed the non-underperformance at 12 months comparing to benchmark returns, and also identified the negative abnormal returns of 36 - 60 months [9]. AbdehTabrizi and Demuri in 2003 studied the IPO in Tehran Stock Market in Iran and found the higher returns of new stocks comparing to market return if investors hold them for two months period. They also found the downward movement of accumulative abnormal return in thirty four month period [10].

Younesi, Ardekani, and Hashemijoo in 2012 studied the IPO in Malaysia and concluded that investors who are looking for new opportunities by investing in IPO, cannot gain by purchasing stocks on the listing day and hold those stocks for one year. They could gain only on the first trading day. The IPO cumulative return relative to the market show -3.77 for first week, -14.12 for a month, and -20.7 for a year after listing [11].

The IPO' abnormal returns of different industries are also studied. The study in Iranian oil and chemical industries' IPO showed the higher short term abnormal return than other industries [12]. Schaub, Casey, and Washer in 2003 found the positive abnormal returns of banking industry in New York Stock Exchange over the period 1975-1994, but less than the other non-financial industries [13].

Most existing studies of Thailand investigated the IPO in periods before 1997 economic crisis. Chorruk and Worthington in 2008 identified that IPO in SET underperformed the market at the end of month 19 aftermarket by using buy-and-hold abnormal returns method. There are limited numbers of studies on IPO' short term abnormal return in Thailand especially by using daily based data [14].

#### IV. DATA AND RESEARCH METHOD

The sample of 153 new listing companies in SET during 2003-2013 is used. These IPO are from eight different industries which include 6 companies in agro and food, 3 companies in consumer products, 19 companies in financials, 19 companies in industrials, 14 companies in resources, 28 companies in services, 43 companies in property and construction, and 21 companies in technology. The issuing prices of IPO are collected from Stock Exchange of Thailand. The closing price of IPO, and the closing index of SET over time horizon are collected from SET factsheets, and SETSMART (SET Market Analysis and Reporting Tool). This web-based application from SET integrates the Thai listed company data, including the historical stock prices, indexes, and listed company news.

It is hypothesized that investors can significantly earn the abnormal returns from the first trading day. Also, the abnormal returns are significantly higher than zero at 95 percent level of confidence if the investor invests in IPO stock at the offering price and hold it for short term within 1 year. Abnormal return of IPO stocks will be measured by comparing each IPO's return with the benchmark returns, which are represented by SET Index returns. The methodology of previous study by Ritter in 1991, and Casey, and Washer in 2003 are applied [6], [13].

The steps of data analysis are as follow:

First the daily return for each company i for event day t is calculated as:

$$R_{i,t} = \frac{(P_c - P_i)}{P_i}$$

where:

 $R_{i,t}$  is the return for stock *i* in event day *t* 

 $P_i$  is the issuing price of stock *i* 

 $P_c$  is the closing price of stock *i* at the end of day *t* 

The daily period t is used up to 360 days

Second, the benchmark returns which are represented by market returns are calculated by the same method.

$$R_{mkt,t} = \frac{(P_{c\_mkt} - P_{i\_mkt})}{P_{i\_mkt}}$$

where:

 $R_{mkt,t}$  is the return for market in event day t

 $P_{i \ mkt}$  is the closing index on a day before the first trading

day

 $P_{c_mkt}$  is the closing index at the end of day t

Third, abnormal returns  $AR_{i,t}$  are computed as the different of the return of stock i and return of the market over the same period:

$$AR_{i,t} = R_{i,t} - R_{mkt,t}$$

Fourth, the average abnormal return  $\overline{AR_{i,t}}$  for day t of n stocks is calculated:

$$\overline{AR_{i,t}} = \frac{\sum_{t=1}^{n} AR_{i,t}}{n}$$

Lastly, t-test statistic is applied to determine whether the abnormal returns are significant different from zero:

$$AR_t_{day} = \frac{\overline{AR_{l,t}}}{\sigma(AR_t)/\sqrt{n}}$$

## V. RESULTS AND CONCLUSION

The exploring of the abnormal returns from 153 IPO stocks by using the daily data identifies the short term abnormal returns of IPO. If the investors buy the IPO stocks at the issuing price, they can significantly earn 23.83 percent average abnormal returns on the first trading day at 95 percent level of confidence.

After the first trading day, the abnormal returns decline to be at 16-20 percent until day 33. Then they increases to 20-30 percent significantly until day 233. From day 234 until day 246, average abnormal returns of IPO are below 20 percent. The abnormal returns are significantly higher than zero until day 246. The results identify the negative average abnormal returns after day 312-day 360. This confirms the short term outperformance of IPO, but long term underperformance the market of IPO in the equity market of Thailand (Table I).

TADIEL	ADNODMAL	DETUDNE OF IDO
LABLET	ABNORMAL	. KETURNS OF IPU

	Average	Standard	<i>t</i> -statistic	<i>p</i> value
	AR	Deviation		r
Day 1	23.830	41.306	5.593	0.000
Day 2	20.749	42.509	4.732	0.000
Day 3	20.271	44.418	4.425	0.000
Day 4	21.171	45.459	4.515	0.000
Day 5	19.832	44.340	4.337	0.000
Day 6	19.988	46.197	4.195	0.000
Day 7	19.892	47.080	4.096	0.000
Day 8	19.519	46.826	4.041	0.000
Day 9	18.268	46.364	3.820	0.000
Day 10	17.952	47.259	3.683	0.000
Day 11	17.875	46.576	3.721	0.000
Day 12	16.920	46.902	3.498	0.001
Day 13	17.036	48.386	3.414	0.001
Day 14	16.751	48.629	3.340	0.001
Day 15	16.767	48.160	3.375	0.001
Day 16	16.841	48.464	3.369	0.001
Day 17	17.153	50.190	3.313	0.001
Day 18	17.283	50.859	3.295	0.001
Day 19	17.843	51.896	3.334	0.001
Day 20	18.065	52.692	3.324	0.001
Day 21	18.836	54.852	3.329	0.001
Day 22	19.188	56.950	3.267	0.001
Day 23	19.701	60.728	3.145	0.001

Day 24	19.369	59.538	3.154	0.001
Day 25	20.331	62.642	3.147	0.001
Day 26	19.798	61.618	3.115	0.001
Day 27	20.458	63.399	3.128	0.001
Day 28	20.130	62.639	3.116	0.001
Day 29	20.012	62.155	3.122	0.001
Day 30	19.712	61,206	3.123	0.001
U	Average	Standard	t-statistic	n value
	Average	Descietion	<i>i</i> -statistic	<i>p</i> value
Day 21	AK 10.722		2 1 4 6	0.001
Day 51	19.755	60.819	3.140	0.001
Day 52	10.065	60.782	2 1 9 5	0.001
Day 55	19.905	60.782	3.165	0.001
Day 34	20.384	61.541	3.211	0.001
Day 55	21.239	64.852	2 2 9 0	0.001
Day 30	22.605	64.852	3.380	0.001
Day 37	22.460	64.454	3.360	0.001
Day 38	22.960	65.608	3.393	0.001
Day 39	23.024	65.148	3.426	0.001
Day 40	23.452	64.967	3.500	0.001
Day 41	23.692	65.093	3.529	0.001
Day 42	23.975	65.437	3.552	0.001
Day 43	23.865	65.639	3.525	0.001
Day 44	24.752	66.724	3.597	0.001
Day 45	25.301	68.952	3.558	0.001
Day 46	25.180	69.198	3.528	0.001
Day 47	24.237	68.210	3.445	0.001
Day 48	24.697	68.305	3.506	0.001
Day 49	24.650	68.974	3.465	0.001
Day 50	25.947	67.303	3.718	0.000
Day 51	25.484	67.719	3.629	0.000
Day 52	25.260	70.282	3.485	0.001
Day 53	25.785	71.344	3.485	0.001
Day 54	25.736	71.654	3.482	0.001
Day 55	25.583	72.120	3.439	0.001
Day 56	26.311	75.816	3.365	0.001
Day 57	27.456	74.227	3.567	0.001
Day 58	25.984	74.825	3.367	0.001
Day 59	26.167	75.279	3.370	0.001
Day 60	26.764	74.641	3.477	0.001
Day 61	26.710	75.495	3.430	0.001
Day 62	26.210	74.538	3.409	0.001
Day 63	27.330	76.654	3.457	0.001
Day 64	27.774	77.689	3.466	0.001
Dav 65	28.201	78.648	3.477	0.001
Dav 66	28.444	77.907	3.540	0.001
Day 67	28.419	78.518	3.509	0.001
Day 68	28,950	77.973	3,600	0.001
Day 69	30.255	79.652	3 683	0.000
Day 70	30.124	79.102	3 692	0.000
Day 71	30.842	80.214	3.092	0.000
Day 72	30.169	79.623	3.674	0.000
Day 72	28.020	79.023	2 5 2 5	0.000
Day 73	20.730	70 224	3.555	0.001
Day 74	29.428	77 205	2.695	0.000
Day /5	29.379	77.505	2.083	0.000
Day /6	29.646	/6.5/1	3.754	0.000
Day 77	29.680	/5.156	3.829	0.000
Day 78	30.138	/5.504	3.870	0.000
Day 79	28.964	/4.848	3.752	0.000
Day 80	29.668	75.949	3.787	0.000
Day 81	29.297	78.074	3.638	0.000
Day 82	30.970	77.703	3.864	0.000
Day 83	30.197	77.627	3.751	0.000

International Journal of Trade	Economics and Finance,	Vol. 6,	No. 2, April 2015
--------------------------------	------------------------	---------	-------------------

Day 84	30.143	77.052	3.793	0.000
Day 85	30.064	75.849	3.843	0.000
Day 86	29.840	74.980	3.859	0.000
Day 87	29.572	74.397	3.854	0.000
Day 88	30.391	75.966	3.879	0.000
Day 88	30.391	75.966	3.879	0.000
Day 89	29.752	75 419	3 825	0.000
	Average	Standard	t_statistic	n value
	Average		<i>i</i> -statistic	<i>p</i> value
- D 00	AK 20.140	Deviation	2.056	0.000
Day 90	30.149	/5.800	3.856	0.000
Day 91	32.194	80.867	3.860	0.000
Day 92	32.306	79.421	3.944	0.000
Day 93	31.923	79.099	3.913	0.000
Day 94	31.673	77.031	3.986	0.000
Day 95	30.598	75.494	3.930	0.000
Day 96	29.769	74.498	3.874	0.000
Day 97	31.021	75.118	4.004	0.000
Day 98	31.186	75.584	3.979	0.000
Day 99	30.891	74.765	4.006	0.000
Day 100	30.574	74.247	3.992	0.000
Day 101	29.464	73.341	3.895	0.000
Day 102	29.009	73.435	3.830	0.000
Day 103	29.025	73.135	3.848	0.000
Day 104	29.738	76.247	3.781	0.000
Day 105	30.267	79.520	3.690	0.000
Day 106	30.115	79.147	3 669	0.000
Day 107	30.648	79.258	3 729	0.000
Day 107	29.288	79.595	3.549	0.000
Day 100	29.200	79.393	3.549	0.001
Day 109	29.404	76.802	2.745	0.000
Day 110	29.511	76.406	3.745	0.000
Day 111	29.063	74.100	3.800	0.000
Day 112	29.710	76.125	3.764	0.000
Day 113	29.375	75.956	3.750	0.000
Day 114	29.603	75.193	3.817	0.000
Day 115	29.894	75.337	3.827	0.000
Day 116	29.361	75.715	3.760	0.000
Day 117	28.799	74.940	3.726	0.000
Day 118	28.782	75.162	3.713	0.000
Day 119	27.009	74.703	3.505	0.001
Day 120	27.925	74.358	3.641	0.000
Day 121	27.525	75.643	3.528	0.001
Day 122	27.891	76.766	3.523	0.001
Day 123	27.578	76.548	3.474	0.001
Day 124	27.712	78.003	3.426	0.001
Day 125	27.800	78.833	3.419	0.001
Day 126	27.683	78.198	3.432	0.001
Day 127	27.171	77.357	3.387	0.001
Day 128	26.491	76.213	3.370	0.001
Day 129	27.104	76.905	3.417	0.001
Day 130	27.286	75.714	3.475	0.001
Day 131	26.699	75,986	3.407	0.001
Day 132	26 977	75.669	3 4 5 6	0.001
Day 133	27,146	77,220	3 408	0.001
Day 13/	26.828	76.479	3 401	0.001
Day 125	20.020	76.600	3 366	0.001
Day 135	20.028	10.098	2 174	0.001
Day 130	23.401	042	2.059	0.001
Day 13/	24.08/	11.845	3.058	0.002
Day 138	23./58	/6./21	3.002	0.002
Day 139	23.332	75.644	2.990	0.002
Day 140	23.310	74.842	3.020	0.002
Day 141	23.107	75.321	2.974	0.002
Day 142	23 400	75 884	2 990	0.002

Day 143	21.342	76.022	2.722	0.004
Day 144	20.946	75.259	2.698	0.004
Day 145	20.637	74.794	2.675	0.005
Day 146	21.316	76.492	2.702	0.004
Day 147	21.718	77.736	2.694	0.004
Day 148	22.358	77.937	2.781	0.004
Day 149	22.518	79.362	2.736	0.004
	Average	Standard	t-statistic	<i>p</i> value
	AR	Deviation		I
Day 150	22 714	79 182	2 781	0.004
Day 150	23 450	80.402	2 828	0.003
Day 152	22.173	77.411	2.777	0.004
Day 153	20.832	78.937	2.559	0.006
Day 154	20.919	78.327	2.589	0.006
Day 155	22.113	80.304	2.656	0.005
Day 156	23,785	79.233	2.895	0.003
Day 157	22.438	78.085	2.786	0.003
Day 158	21.876	78.481	2.703	0.004
Day 159	21.614	79.724	2.628	0.005
Day 160	22.518	78,593	2.778	0.004
Day 161	21.484	79.652	2.615	0.005
Day 162	22.997	76.757	2.889	0.003
Day 163	24.287	77.247	3.016	0.002
Day 164	23 543	78 407	2 911	0.003
Day 165	25.220	80.616	3.017	0.002
Day 166	24.706	81.382	2.928	0.002
Day 167	24 155	80.356	2.928	0.002
Day 168	21.135	80 719	2.742	0.004
Day 169	23.936	80.139	2.896	0.003
Day 170	24.036	82 356	2.830	0.003
Day 171	23.829	81,780	2.825	0.003
Day 172	23.266	82.645	2.729	0.004
Day 173	22.166	81,599	2.634	0.005
Day 174	24.097	80.537	2.901	0.003
Day 175	24.678	80.621	2.952	0.002
Day 176	23.901	82.366	2.813	0.003
Day 177	24.895	82.138	2.939	0.002
Day 178	24.987	82.760	2.896	0.003
Day 179	24.026	81.907	2.844	0.003
Day 180	24.246	81.652	2.864	0.003
Day 181	23.754	81,199	2.836	0.003
Day 182	22.709	79.758	2.761	0.004
Day 183	22.959	82.016	2.700	0.004
Day 184	23,491	81.737	2.772	0.004
Day 185	23.511	81.995	2.780	0.004
Day 186	24.085	83.218	2.806	0.003
Day 187	25.203	85.253	2.851	0.003
Day 188	24.742	84.173	2.850	0.003
Day 189	24.346	84.294	2.800	0.003
Day 190	21.887	83.263	2.549	0.006
Day 191	24.418	84.380	2.806	0.003
Day 192	24.306	84.761	2.780	0.004
Day 193	23.758	85.273	2.701	0.004
Day 194	23.996	86.270	2.697	0.004
Day 195	23.816	86.349	2.674	0.005
Day 196	23.753	86.477	2.663	0.005
Day 197	24.487	88.795	2.674	0.005
Day 198	26.119	90.641	2.779	0.004
Day 199	24.515	89.041	2.669	0.005
Day 200	26.025	91.050	2.757	0.004
Day 201	22.855	90.563	2.447	0.008
Day 202	24.081	89.166	2.618	0.005

Day 203	24.907	90.253	2.676	0.005
Day 204	22.705	91.070	2.417	0.009
Day 205	24.769	88.836	2.703	0.004
Day 206	24.176	88.286	2.655	0.005
Day 207	25.112	88.069	2.750	0.004
Day 208	24.426	88.064	2.689	0.004
Day 209	23.848	87.795	2.620	0.005
	Average	Standard	t-statistic	p value
	AR	Deviation		
Day 210	23.931	85.604	2.696	0.004
Day 211	23.373	85.491	2.637	0.005
Day 212	22.954	88.847	2.491	0.008
Day 213	24.251	88.105	2.654	0.005
Day 214	23.825	88.051	2.595	0.006
Day 215	24.078	88.107	2.621	0.005
Day 216	24.409	88.239	2.668	0.005
Day 217	23.073	88.911	2.503	0.007
Day 218	24.343	88.608	2.649	0.005
Day 219	23.445	88.100	2.553	0.006
Day 220	21.373	87.440	2.345	0.011
Day 221	22.548	85.962	2.516	0.007
Day 222	22.028	85.592	2.468	0.008
Day 223	21.860	84.258	2.488	0.008
Day 224	23.635	85.699	2.616	0.005
Day 225	21.182	84.267	2.411	0.009
Day 226	21.809	84.018	2.476	0.008
Day 227	20.534	85.156	2.313	0.012
Day 228	20.794	84.569	2.358	0.010
Day 229	19.479	84.403	2.202	0.015
Day 230	20.969	82.751	2.430	0.009
Day 231	20.876	82.825	2.418	0.009
Day 232	21.379	82.904	2.460	0.008
Day 233	21.200	82.015	2.452	0.008
Day 234	19.665	81.711	2.296	0.012
Day 235	19.500	79.140	2.363	0.010
Day 236	19.446	81.198	2.285	0.013
Day 237	15.201	78.981	1.846	0.034
Day 238	14.997	77.827	1.848	0.034
Day 239	14.075	75.711	1.783	0.039
Day 240	14.675	76.578	1.838	0.035
Day 241	14.132	77.650	1.746	0.042
Day 242	14.139	77.579	1.748	0.042
Day 243	13.809	77.639	1.706	0.046
Day 244	14.034	77.657	1.733	0.043
Day 245	13.804	77.547	1.707	0.046
Day 246	13.896	77.762	1.714	0.045

The study of IPO in different 8 industries was also examined. Table II shows that four industries which are financial, service, resources, and technology provide significant positive abnormal returns at 95 percent level of confidence.IPO of financial industry provides the highest first trading day abnormal returns of 45.93 percent followed by service, resources, and technology industries (Table II).

Financial industry provides the longest period of 246 trading days aftermarket to earn the abnormal return. The results show that financial industry's IPO provide higher abnormal returns than other industries. From day 2 to day 22, the abnormal returns are at 35-45 percent. Then abnormal returns increases to be between 45-75 percent from trading day 23 until day 139. Then the abnormal returns are at the level of 50-60 percent during trading day 140 to day 190.

Investors can earn high abnormal returns at 60-70 percent on day 191 to day 233, then the performance of this industry's IPO decrease to be at 50-60 percent on trading day 234 to day 246.

TABLE II: ABNORMAL RETURNS OF IPO FROM DIFFERENT INDUSTRIES					
Industry	First Trading	t-statistic	p-value	Periods of	
	Day Abnormal			Abnormal	
	Return			Return	
Financial	45.93%	2.470	0.150	until 246	
				days	
Service	34.88%	3.065	0.004	until 137	
				days	
Resources	30.53%	3.343	0.005	until 120	
				days	
Technology	28.47%	2.748	0.007	until 125	
				days	

Service industry provides 34.88 percent abnormal returns on the first trading day with the period of 137 days aftermarket of generating abnormal returns. The abnormal returns from trading day 2 to day 32 are at 23 to 35 percent. Trading day 33 to day 79 provide the abnormal returns of 35 to 50 percent, then they increases to be at 45 to 55 percent during day 80 to day 137.

Resources industry' IPO stocks provide the 30.53 percent abnormal returns on the first trading day with 120 days of earning the abnormal returns. The average abnormal returns from the second trading day to day 120 are at 25 to 40 percent.

IPO of technology industry can generate 28.47 percent abnormal returns on the first trading day with the 125 trading days of outperformance. The average abnormal returns are at 20 to 35 percent.

The other four industries which are agro and food, consumer products, industrials, and property and construction do not significantly provide abnormal returns on the first trading day and also other days after listing. The results show the negative average returns of IPO in consumption industry on the first trading day. IPO in property industry provide significantly negative abnormal returns on 293 days aftermarket.

This study's results identify the inefficiency of pricing movement of IPO in capital market in Thailand, which provides the opportunity for investors to generate abnormal returns from this event. The analysis of daily abnormal returns after offerings also contributes the different viewpoint of short term performance of IPO from other studies.

The research's results benefit both individual and also institutional investors such as mutual funds management companies to manage their portfolios by including the IPO stocks and hold them for short term period to outperform the market. The four industries should be emphasized in generating abnormal returns. The insight information in term of number of days to hold the IPO in a portfolio to generate significant positive abnormal returns is also useful for the investors.

The author highly expects that the outperforming of IPO over the market return can encourage the investors to invest more in equity market. This finally provides more opportunities for private corporations to raise funds by issuing stocks for their expansion and to promote the growth and stabilize of economy and Stock Exchange of Thailand, especially as the leading equity market in ASEAN.

#### REFERENCES

- SET Annual Report, Stock Exchange of Thailand, Bangkok, pp. 10-20, 2012.
- [2] SET Annual Report, Stock Exchange of Thailand, Bangkok, pp. 10-25, 2013.
- [3] R. M. Kunz and R. A. Reena, "Why initial public offerings are underpriced: Evidence from Switzerland," *Journal of Banking and Finance*, vol. 18, no. 4, pp. 705-723, 1994.
- [4] R. G. Ibbotson, J. L. Sindelar, and J. R. Ritter, "The market's problems with the pricing of initial public offerings," *Journal of Applied Corporate Finance*, vol. 7, pp. 66-74, 1994.
- [5] Z. Smith, "An empirical analysis of initial public offering (IPO) price performance in Unitied States," *Journal of Finance and Accountancy*, *An Empirical Analysis*, pp. 1-19, 2009.
- [6] J. R. Ritter, "The long-run performance of initial public offerings," *Journal of Finance*, vol. 1, pp. 3-27, 1991.
  [7] R. Aggarwal and P. Rivoli, "Fads in the initial public offering market?"
- [7] R. Aggarwal and P. Rivoli, "Fads in the initial public offering market?" *The Journal of the Financial Management Association*, vol. 19, no. 4, pp. 45-57, 1990.
- [8] T. Kaya, "The short term performance of initial public offerings in Istanbul stock exchange: 2010-2011 application," *Journal of Business, Economics & Finance*, vol. 1, no. 1, pp. 64-76, 2012.
- [9] S. Alvarez and V. Gonzalez. (2011). Long-run performance of initial public offerings (IPO) in Spanish capital market. [Online]. Available: http://dx.doi.org/10.2139/ssrn.274086
- [10] T. H. AbdehTabrizi and D. Dariush, "Identifying the effective factors in stock return of newly accepted firms in tehran stock market," *Financial Researches Quarterly Periodical*, vol. 5, no. 15, pp. 24-30, 2003.

- [11] N. Younesi, A. M. Ardekani, and M. Hashemijoo, "Performance of Malaysian IPO and impact of return determinants," *Journal of Business Studies Quarterly*, vol. 4, no. 2, pp. 140-158, 2012.
- [12] M. Filsaraei, A. Azarberahman, and J. Azarberahman, "An empirical analysis for abnormal returns from initial public offerings (IPO): Evidence of Iranian oil and chemical industries," *International Journal* of Accounting and Financial Reporting, vol. 3, no. 1, pp. 143-161, 2013.
- [13] M. Schaub, M. K. Casey, and K. M. Washer, "Banking industry IPO returns: A test of the informational asymmetry hypothesis," *Southwest Business and Economics Journal*, vol. 12, pp. 19-24, 2003-2004.
- [14] J. Chorruk and A. C. Worthington, "New evidence on the pricing performance of initial public offerings in Thailand," *Emerging Markets Review*, vol. 11, no. 3, pp. 285-299, 2010.



Marisa Laokulrach was born in 1976 in Bangkok, Thailand. She graduated with a Ph.D. degree in development administration (international) from The National Institute of Development Administration (NIDA), Thailand. She received the master degree in business administration (MBA) and the bachelor degree in business administration, majoring in finance and banking from Assumption University (ABAC), Thailand.

Currently, she is a full time lecturer in the Department of Finance and Banking, Martin de Tours School of Management and Economics, Assumption University (ABAC), Thailand. She is interested in the research areas on equity market, investment, and public finance.