

## THE INTRA-INDUSTRY SPILLOVERS OF INDONESIAN RIGHT OFFERINGS

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**Abstract.** This study aims to examine the spillover effect of right offerings to the industry on the Indonesian Stock Exchange in the period 2009-2016. This study is designed using event study methodology. In total, there are 96 issuing companies (issuers) and 1205 non-issuing companies (non-issuers) used as the sample which was obtained using a purposive sampling technique. The test for information content on the right issues was conducted using standard t-test on the average cumulative abnormal return of issuers and non-issuers in the period  $t-10$  to  $t+10$  around the issuance. The research found positive abnormal returns for issuers in  $t_0$  to  $t+4$  but did not confirm the spillover effect to non-issuers over the observed (window) periods. The average cumulative abnormal returns are randomly distributed during the window period. These results confirm the absence of intra-industry effect of right issues on the non-issuers' performance.

**Keywords:** intra-industry effect, spillover effect, pre-emptive rights, seasoned equity offering, event study, right issue

**Abstrak.** Penelitian ini bertujuan untuk menguji keberadaan dampak penularan intra-industri dari hak memesan efek terlebih dahulu (HMETD) di Bursa Efek Indonesia pada rentang waktu 2009-2016. Penelitian didesain menggunakan pendekatan studi peristiwa. Secara keseluruhan, sampel terdiri dari 96 perusahaan penerbit HMETD dan 1205 perusahaan non-penerbit HMETD yang disaring menggunakan teknik bertujuan. Pengujian terhadap konten informasi HMETD dilakukan menggunakan standard t-test pada rata-rata kumulatif abnormal return perusahaan penerbit dan non-penerbit di periode  $t-10$  sebelum sampai dengan  $t+10$  sesudah penerbitan HMETD. Hasil pengujian menunjukkan adanya return positif pada perusahaan penerbit di  $t_0$  sampai dengan  $t+4$ , namun tidak berhasil membuktikan adanya dampak penularan terhadap perusahaan non-penerbit sepanjang periode jendela (observasi). Rata-rata kumulatif abnormal return yang ditemukan terdistribusi acak sepanjang periode jendela. Hasil ini membuktikan bahwa dampak kinerja dari HMETD tidak memberikan penularan intra-industri terhadap perusahaan non-penerbit.

**Keywords:** transfer informasi intra-industri, dampak penularan, hak memesan efek terlebih dahulu, penawaran saham berkala, right issue

### INTRODUCTION

The capital market is a means for companies to obtain additional capital, which can be done by conducting an initial public offering (IPO), a seasoned equity offering (SEO), or a private placement. The IPO can be defined as shares offering to general (public) investors in the primary market, while seasoned equity offerings are additional stock offers conducted within a certain period of time after the company is listed in the capital market. In contrast to these two offers, a private placement is defined as a limited offering of shares by the company to certain investors with agreed terms and conditions (Brealey *et al.*, 2001; Megginson, 1997).

In Indonesia, one of the most widely offerings is the seasoned equity offerings through a rights issue, also known as "pre-emptive rights (*hak memesan efek terlebih dahulu, HMETD*)". Right

issue is a form of seasoned equity offerings whereby the company first entitles current shareholders to buy new additional shares at a certain price and within a certain period of time (Purwanto, 2004).

In the literature, the right issues are often followed by the discussion on how the market responds to the offerings. Some researchers found a positive response to the issuance of rights (Alhashel and Alojayan, 2015; Ariff *et al.*, 2007; Paskelian and Bell, 2010), while some others found a negative response (Akron, 2013; Barnes and Walker, 2006; Feng *et al.*, 2018; Iqbal, 2008; Krishnan *et al.*, 2010). Some researchers explain these different responses by a variety of approaches, including by associating them with variations in the motivation of right offerings among companies (Brisker *et al.*, 2014; Kim and Purnanandam, 2014; Veld *et al.*, 2018; Yang *et al.*, 2016), variations of inherent attributes in the issuers (Chan and Walter, 2014; Chen, 2017; Dutordoir *et al.*, 2018; Fu and Huang, 2016; Liu *et al.*, 2016; Naveen *et al.*, 2018), and variations of investor biases in responding to the rights (Devos *et al.*, 2017; Dutta, 2017; Huang *et al.*, 2016).

In addition to giving an impact on the issuer, several studies also found the impact of the right issues on the non-issuer rivals. In the literature, this condition is also known as intra-industrial information transfer or information spillover (Schipper, 1990; Chen *et al.*, 2016; Khachoo and Sharma, 2016). There are two possible effects of intra-industrial information transfer, namely contagion and competitive effects (Lang and Stulz, 1992; Chang *et al.*, 2015; Chen *et al.*, 2016). Contagion effects indicate a consistent (equal) impact transmission while competitive effects indicate a contradictory (different) transmission of impacts on all companies in the industry.

There are some researches related to information spillovers over the right offerings including those conducted by Szewczyk (1992), Slovin *et al.* (1992), and Bradley and Yuan (2013). Szewczyk (1992) revealed a contagion effect or negative abnormal returns in the industry when there is a company in the industry conducts seasoned equity offerings, either the offerings is in the form of convertible bonds or in the form of right issues. Meanwhile, Slovin *et al.* (1992) only discovered intra-industry information transfer with contagion effects on right issues among companies in the banking and financial sectors but failed to prove information spillovers for companies in the manufacturing industry. Categorizing stock offerings to the initial offers and secondary offers, Bradley and Yuan (2013) confirmed the competitive effect on IPO and the contagion effect on right issues. Bradley and Yuan (2013) suspected the overvaluation signal of rights as the cause of this different effect.

In Indonesia, the studies regarding information spillovers of right offerings are still rarely addressed. The existing studies of Indonesian right offering so far mainly investigate both the short and the long-term market reactions to the issuers' performance (Catranti, 2009; Susanti and Ardiana, 2014; Kamalsah and Panjaitan, 2015; Bahri, 2018, Rafik and Azmi, 2019). Norhamida (2006) and Saputra (2015) are some of the researchers who have tried to prove the existence of intra-industry spillovers of right issues in Indonesia. Using 32 issuing companies and 149 non-issuing companies in 1997-2002, Norhamida claimed the existence of intra-industry spillovers. Unfortunately, this claim seems premature and is not accompanied by a robust methodological design. Norhamida (2006) used the average abnormal return instead of the cumulative abnormal return to test the post issuers' performance and failed to find systematic and significant abnormal returns in the period of  $t_0$  to  $t+5$  after right issues. The average abnormal return was random and insignificant. On the other hand, the average abnormal return of non-issuers was significantly negative at  $t+3$  after right issues. The insignificance of the average abnormal returns for the issuers and the significance of them for non-issuers at only  $t+3$ , substantively, should more confirm the absence of intra-industry spillovers rather than its existence as claimed by Norhamida (2006). This is not to mention the fact that Norhamida (2006) used the average normal return as the indicator of measuring post-issuers' performance, instead of the cumulative average abnormal return. Furthermore, a related study, conducted by Saputra (2015) that only used one issuing companies and 25 non-issuing companies, revealed the absence of spillover effects on the observed right offerings. However, apart from the

number of samples that are very small, Saputra's study also has serious methodological problems due to the lack of statistically reliable approach.

To anticipate the shortcoming issues of such previous studies, in the Indonesian context, this study seeks to analyze the existence of intra-industry spillovers using a relatively large number of samples, either for the issuers or non-issuers, with a longer and newest period of observations, namely 2009-2016. In addition, this study also seeks to overcome the methodological weaknesses in terms of measurements by directly using the cumulative average abnormal return instead of the average abnormal return in measuring performance. Although not completely new in the global arena, this study is expected to contribute more specifically to the issue of how information externalities of right offerings can propagate into the industry through signalling mechanisms in the emerging capital markets, especially in Indonesia. The differences in market structures between developing and developed countries as has been recognized in the literature are expected to have an influence on how the transmission of information flows in and is responded by the market.

## LITERATURE REVIEW

**Seasoned Equity Offering.** A seasoned equity offering is an additional stock offering conducted by public companies after initial public offerings (Megginson, 1997). It is possible to conduct seasoned equity offerings through a general cash offer or right issues (Brealey *et al.*, 2001). The general cash offer is the sale of securities to all interested investors with or without involving an underwriter. In this way, securities can be offered through second offerings, third offerings, and so on. Meanwhile, the right issue is the sale of securities to the existing shareholders at a price and for a certain period of time.

In general, various motivations are known to encourage companies to conduct a seasoned equity offerings, including; 1) to obtain additional funds for investment purposes; 2) to optimize capital structure; 3) to increase liquidity; 4) to increase the company's value; 5) to maintain the stake of existing shareholders; and 6) to increase stock liquidity.

**Right Issue.** Right issue is an offer of rights given to current shareholders to buy additional shares at a certain price and within a certain period of time. Right issue is a pre-emptive rights, that in Indonesia also known as *hak Memesan Efek Terlebih Dahulu (HMETD)*. According to Fahmi and Hadi (2009), rights issue is the granting of rights to the current shareholders to pre-order the shares of the issuer that will be sold at a certain nominal price.

Right issue is a right that gives an option for the shareholders not to use that right, allow it to expire, or sell that right to someone else. When right offerings are accompanied by standby buyers, the remaining offered shares that are not all sold and not taken by the right holders will be bought partly or entirely by the standby buyer.

When the company offers the right issues, it is the existing shareholders who will get pre-emptive right. Pre-emptive rights provide the current shareholders with the rights to first buy the offered shares prior to others. Pre-emptive rights are given with two main objectives; the first objective is to protect the control of current shareholders, and the second objective is to protect the existing shareholders from deteriorating ownership of shares which is often referred to as dilution. When a company issues new shares, the number of outstanding shares will increase so that the stake of current shareholders will be reduced or diluted. The dilution of this ownership will result in a dilution of returns for the existing shareholders because the new shareholders will have a better chance of claim for a portion of the company's profit compared to before.

The success of right issues often lies on how investors perceive and respond to the purpose of the right issues. If the right issue is deemed to be capable of increasing profits and optimizing the

capital structure in the future, it is likely that investors will execute their pre-emptive rights. However, when the right issue is considered to have a negative impact on the company, the investors tend to avoid executing their pre-emptive rights or even they prefer selling their existing shares (Bestari, 2015).

Most research findings in the related literature are predominated with negative market response to the issuance of rights, both in the short and long term, over the findings revealing the positive market responses (Bessler *et al.*, 2016; Devos *et al.*, 2017; Dutta, 2017; Eom, 2014; Kothari *et al.*, 2016; Lizińska, 2018; Mansali and Daadaa, 2018). In most cases, the negative responses are closely related to the presumption that the right issues signals an information asymmetry that is not favourable for investors. In the context of market imperfection, managers are deemed to have more complete and comprehensive information than the market on why capital needs are supported by equity, despite the fact that based on the capital structure theory, equity is generally considered as an alternative that is not as attractive as debt. The same held true for the Indonesian context since the latest findings from Rafik and Azmi (2019) confirm declining performance up to 36 months after the right offerings.

**Intra-Industry Spillovers.** According to Bradley and Yuan (2013), information spillovers refers to the process by which unique information about a company announced by a particular company (reporter) transmits the relevant information to other companies that do not announce (non-reporter) the information. In this way, intra-industry spillovers can be defined as a condition by which the corporate actions made by a company not only affects the performance of the announcing company (reporter) but also affects the performance of other companies that do not conduct the actions (non-reporters) at the same industry. Furthermore, Laux *et al.* (1998) and Ferguson and Crockett (2003) state that the intra-industry spillovers arise when a company release information and such information affects the stock price of other companies in the same industry.

According to Schipper (1990), intra-industry spillover is triggered by the communal or similar characteristics shared by the industry. Companies in the same industry are predisposed to face the same situation and environment, so the corporate actions made by a company in one industry will provide other companies in the same industry with relevant information about the circumstances and uncertainties they have to face. Such information transfer is triggered by the fact that industry often consists of relatively the same companies. Hence, more often than not, the investors of the industry will interpret the actions made by a certain company as information that affects other companies in the same industry. In this case, the higher the level of industrial homogeneity, the higher the likelihood that the rate of return of the issuing company corresponds to the rate of return of other companies in the industry (Kohers, 1999).

In addition, the existence of information intermediaries and disseminators, such as analysts and financial print media, also encourages signals of similarity or commonality in the industry given that they usually summarize, analyze, and disseminate information about public companies, industries, and macroeconomic conditions in a single report intact (Asquith *et al.*, 2005; Frankel *et al.*, 2006). Badertscher *et al.* (2013) have proven that the information intermediaries allow the listing of a company on an exchange in the industry to reduce industrial uncertainty and facilitate other private companies in the industry to manage investments more efficiently.

Intra-industry spillovers can occur in a variety of corporate actions, such as private placements (Chen *et al.*, 2016), initial public offerings (Bradley and Yuan, 2013), changes in bond ratings (Hu *et al.*, 2016), fraudulent financial reporting (Beatty *et al.*, 2013), presence of public companies (Badertscher *et al.*, 2013), and profit releases (Cazier *et al.*, 2018).

Lang and Stulz (1992) explain that the impact of intra-industry spillovers may vary, depending on the direction of changes in stock prices on the market. The effects that can arise are

competitive effect and contagion effect. A competitive effect is an effect that occurs when a non-reporter company's stock price moves in the opposite direction to a reporter company's stock price. Meanwhile, the contagion effect is the effect that occurs when a non-reporter company's stock prices move in the same direction (comove) with the stock price of reporters (Chang *et al.*, 2015; Chen *et al.*, 2016).

**Hypotheses Development.** In the literature, the arising issues regarding market reactions following right issues can be generally classified into two main factions, namely short-term reactions (Ariff *et al.*, 2007; Barnes and Walker, 2006; Feng *et al.*, 2018; Iqbal, 2008; Krishnan *et al.*, 2010; Paskelian and Bell, 2010; Shahid *et al.*, 2010) and long-term reactions (Andrikopoulos, 2009; Bayless and Jay, 2008; Devos *et al.*, 2017; Du *et al.*, 2016; Dutta, 2017; Mansali and Daadaa, 2018; Silva and Bilinski, 2015).

There are various findings related to the short-term responses, although most of which confirmed the existence of negative reactions after the issuance of rights. Barnes and Walker (2006) confirmed a negative reaction to the right issues and a positive reaction to the private placement. In line with the findings of Barnes and Walker (2006), Iqbal (2008) revealed consistent negative reactions for companies issuing rights more than once and in sequence. Even though its magnitude decreases with the issuance of the next offerings, the market consistently responds negatively to the right offerings, either for the first, the second or third offerings. This finding also corresponds to the findings of Krishnan *et al.* (2010) for banks that in general are rigidly and specifically regulated and the findings of Feng *et al.* (2018) for socially and environmentally responsible companies. In another side, Walker and Yost (2008) found that the right offerings followed by well-planned and detailed investment plans would turn the market response to be friendlier.

Some researchers also found a positive response to the right offerings. Paskelian and Bell (2010), for example, found positive reactions not only to right offerings but also to private placement for companies in China. This positive reaction is found both in the short and long term, even though the performance of companies with private placements is slightly better than the one with the right issues. Paskelian and Bell (2010) indicate that this finding is related to the regulation of the right issues in China, which is strictly regulated by the government. To be permitted to issue rights, companies in China are at least required to meet the profit and profitability threshold specifically regulated by regulators. This policy is believed to reduce the impact of information asymmetry that might be inherent in the right offerings. However, Ariff *et al.* (2007) also confirmed a positive response to the right issues for companies in Singapore.

Catranti (2009) has made an attempt to test information content in Indonesian right offerings. Her study indicates ambiguous reactions (negative and positive) around the right issues on the companies observed. Meanwhile, Kusuma and Suryanawa (2015) and Dewi and Putra (2013) found no significant abnormal return during the study period used. Based on these mixed results, our first hypothesis is formulated as follows:

*H1: Indonesian right issues gives abnormal returns to the issuer around the announcement days*

In addition to having an impact on the issuers' stock prices, right issues can also have an impact on the non-issuers' stock prices because of intra-industry spillovers. According to Lang and Stulz (1992), the impacts can be divided into two effects, namely contagion effects and competitive effects. Contagion effects are effects that occur when the stock price of non-issuing companies moves in the same direction (comove) as the stock prices of issuing companies, whereas in the competitive effect, the stock price of non-issuing companies moves in the opposite direction (Laux *et al.*, 1998).

Szewczyk (1992) and Slovin *et al.* (1992) found evidence that the offer of new shares resulted in average negative abnormal returns both for the issuing companies and for the non-issuing companies. Another study conducted by Bradley and Yuan (2013) also found evidence that for the

seasoned equity offerings, both issuing and non-issuing companies obtain negative abnormal returns during the observed periods, which means that the offerings bring contagion effects to the industry. Based on the findings of the previous studies, our hypothesis to test the intra-industry spillovers is formulated as follows:

*H2: Indonesian right issues brings contagion effects to non-issuers in the industry*

## METHOD

This study involved all public companies listed on the Indonesia Stock Exchange in the period of 2009-2016 as the population. Samples were selected using purposive sampling method with several criteria, namely; 1) the number of companies in one sub-sector of the issuing companies must consist of at least two companies; 2) the issuing and non-issuing companies do not take other corporate actions during the window period; 3) the issuing and non-issuing companies are not included in the sector 8 code, namely the financial sector considering that this sector is specifically regulated so that it may cause a response bias; and 4) the stock of the issuing and non-issuing companies are actively traded during both the estimation period and the window period. The number of final samples for this study is shown in Table 1.

The data needed in this study include the cum date of right offerings, industry classification based on the Jakarta Stock Industrial Classification (JASICA), daily stock prices of issuing companies and non-issuing companies in the corresponding industries, as well as the daily Indonesian composite index. These data were obtained through the Indonesian Central Securities Depository (*Kustodian Sentra Efek Indonesia, KSEI*), IDX Fact Book, Osiris, and Yahoo Finance. These various data sources are used for triangulation purposes. To determine non-issuer companies, considering the industry representativeness, we took the entire non-issuer companies in the industry instead of using the matched firms.

**Table 1. Samples of Issuers and Non-Issuers**

Panel A. Issuers	
Description	Number of Samples
Companies offering rights during the period of 2009-2016	195
Companies that are in the financial sector (sub-sector code 8)	(80)
Companies with no trading activities during both the estimation and window periods	(10)
Companies that carry out other corporate actions during the window period	(9)
Final samples	96
Panel B. Non-Issuers	
Description	Number of samples
Companies in the same sub-sector as the issuing companies	1632
Companies conducting other corporate actions during the window period	(105)
Companies with no trading activities and incomplete data	(322)
Final samples	1205

The market response to the right issues was carried out by the event study approach. The first step taken in this event study design is to determine the event date, the length of both the estimation and the window periods. The event date ( $t_0$ ) in this study is the cum date of right issues. The estimation period is 95 days before the cum date by which the normal return is determined using

the market model. This 95-day determination is begun from t-11 to t-105 before the cum date. Meanwhile, the window period is set 10 days before (t-10) up to 10 days after cum date (t+10).

The existence of intra-industry spillovers was tested by first identifying and testing the existence of cumulative abnormal returns for the issuers. Afterwards, it was proceeded to identify and test the existence of cumulative abnormal returns of non-issuers. Both the contagion and competitive effects were identified by comparing the direction of the stock movement of non-issuers with the stock movement of the issuers.

## RESULTS AND DISCUSSION

**Descriptive statistics.** Table 2 indicates that the average abnormal returns, both for the issuers and non-issuers, are mixed positively and negatively during the window periods. For the issuing companies, 14 days of average abnormal returns are positive and 7 days of average abnormal returns are negative. The minimum value of the average abnormal return for the issuers occurs at t+1 (-0.838), while the maximum average abnormal return also occurs at t+1 (0.377). This is in line with the highest standard deviation, which also occurs at t+1 (0.124). This indicates that one day after cum date, the stock volatility of issuers increases sharply compared to other days in the window period.

Meanwhile, for non-issuers, the average abnormal return is more volatile and random. The minimum value of the average abnormal returns of the non-issuers occurs at t + 3 (-3.203), while the maximum average abnormal return occurs at t-7 (0.396). Meanwhile, the highest standard deviation value occurs at t+3 (0.098). This standard deviation indicates that the variation of the abnormal returns of non-issuers ranges wider at t+7 compared to other days in the window period.

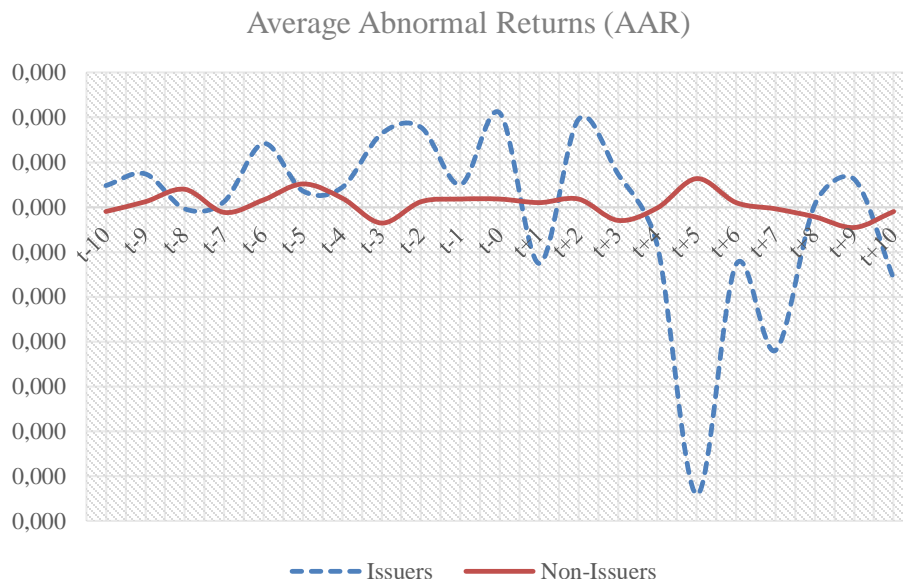
**Table 2.** The Descriptive Statistics of Average Abnormal Returns (AAR) of Issuers and Non-Issuers

Periods	AAR		Min		Max		St. Dev	
	Issuers	Non-Issuers	Issuers	Non-Issuers	Issuers	Non-Issuers	Issuers	Non-Issuers
t-10	0.002	-0.001	-0.161	-0.263	0.205	0.293	0.041	0.032
t-9	0.004	0.001	-0.061	-0.338	0.230	0.246	0.044	0.035
t-8	0.000	0.002	-0.071	-0.275	0.111	0.218	0.028	0.034
t-7	0.001	-0.001	-0.133	-0.417	0.183	0.396	0.038	0.040
t-6	0.007	0.001	-0.058	-0.226	0.183	0.310	0.036	0.036
t-5	0.002	0.003	-0.183	-0.199	0.183	0.319	0.045	0.036
t-4	0.002	0.001	-0.175	-0.233	0.292	0.298	0.054	0.036
t-3	0.008	-0.002	-0.238	-0.343	0.310	0.272	0.063	0.035
t-2	0.009	0.001	-0.112	-0.426	0.224	0.224	0.053	0.036
t-1	0.003	0.001	-0.361	-0.330	0.297	0.302	0.073	0.034
t-0	0.011	0.001	-0.269	-0.205	0.231	0.290	0.068	0.031
t+1	-0.006	0.001	-0.838	-1.524	0.377	0.308	0.124	0.062
t+2	0.010	0.001	-0.090	-0.267	0.276	0.310	0.061	0.037
t+3	0.004	-0.002	-0.099	-3.203	0.295	0.293	0.058	0.098
t+4	-0.004	0.000	-0.174	-0.178	0.246	0.295	0.048	0.033

**Table 2.1** (Continued) The Descriptive Statistics of Average Abnormal Returns (AAR) of Issuers and Non-Issuers

Periods	AAR		Min		Max		St. Dev	
	Non-Issuers	Issuers	Non-Issuers	Issuers	Non-Issuers	Issuers	Non-Issuers	
t+5	0.032	0.003	-0.425	-0.203	0.223	0.359	0.081	0.040
t+6	-0.006	0.001	-0.285	-0.269	0.215	0.295	0.058	0.035
t+7	-0.016	0.000	-0.274	-0.291	0.124	0.294	0.051	0.035
t+8	0.000	-0.001	-0.319	-0.356	0.329	0.176	0.065	0.031
t+9	0.003	-0.002	-0.088	-0.280	0.106	0.252	0.029	0.032
t+10	-0.008	-0.001	-0.222	-0.399	0.217	0.305	0.046	0.039

Figure 1 particularly illustrates that the AAR movement of issuers and non-issuers exhibits a different pattern. The AAR of issuers tends to be more volatile than the AAR of non-issuers. This means that the stock price variation of the issuers is wider than that of the non-issuers. Meanwhile, Figure 2 shows that the ACAR of issuers is positive up to t+5 before finally decreasing until the end of the window periods. The graph also depicts that the ACAR of non-issuer increases gradually and tends to be flat. The lowest ACAR of the issuers is at t+10 and the lowest ACAR of the non-issuers is at t-10. Based on Table 2, Figure 1 and Figure 2, it can be identified early that the market response to the issuers and non-issuers tends to be random without any commonly found pattern in the intra-industry spillovers.



**Figure 1.** The Average Abnormal Return (AAR) of Issuers and Non-Issuers



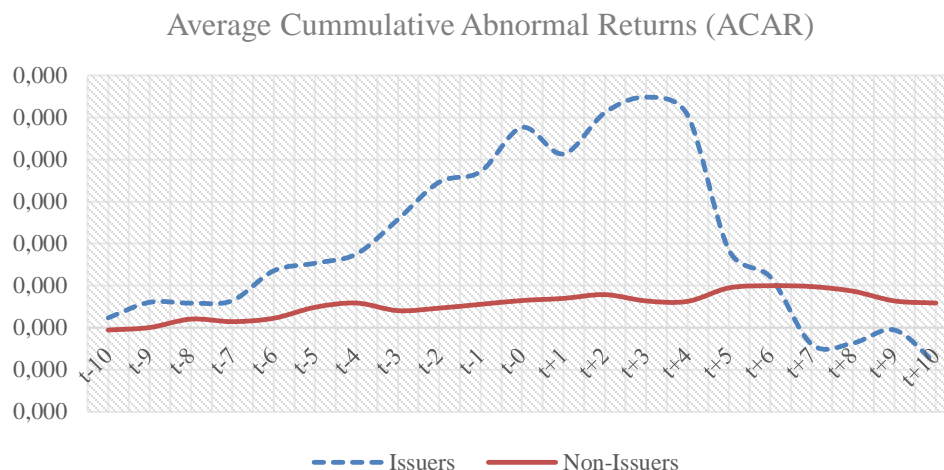


Figure 2. The Average Cummulative Abnormal Returns (ACAR) of Issuers and Non-Issuers

**Hypothesis Testing Results.** Table 3 presents the results of statistical tests on the average cumulative abnormal return (ACAR) for the issuers. Table 3 indicates that during 21 days of the window period, there are 4 days with the negative ACAR and 17 days with the positive ACAR. At t-10 to t+6, the issuers experiences positive ACAR and negative ACAR at t+7 to t+10. The positive ACAR is significant at t0 to t+4, which indicates that the after cum date, the right offerings can be exploited by investors to obtain short-term abnormal returns. However, these positive returns appear unsustainable because the significance of ACAR disappears at t+5 until it finally turns negative starting from t+7.

Table 3. The Statistical Test of ACAR for Issuers

Periods	ACAR	t-Value	Description
t-10	0.0024	0.1217	Insignificant
t-9	0.0061	0.2638	Insignificant
t-8	0.0059	0.2313	Insignificant
t-7	0.0065	0.2362	Insignificant
t-6	0.0136	0.4668	Insignificant
t-5	0.0154	0.5042	Insignificant
t-4	0.0176	0.5556	Insignificant
t-3	0.0258	0.7871	Insignificant
t-2	0.0347	1.0289	Insignificant
t-1	0.0372	1.0742	Insignificant
t0	0.0477*	1.3459	Significant
t+1	0.0414*	1.3424	Significant
t+2	0.0512*	1.3856	Significant
t+3	0.0549*	1.4587	Significant
t+4	0.0506*	1.3204	Significant
t+5	0.0185	0.4740	Insignificant
t+6	0.0120	0.3049	Insignificant
t+7	-0.0040	-0.0996	Insignificant
t+8	-0.0037	-0.0911	Insignificant
t+9	-0.0006	-0.0157	Insignificant
t+10	-0.0087	-0.2079	Insignificant

Note: \* denotes significant ACAR at alpha 10%

This indicates that the information content of right issues as reflected in the ACAR movement is elusive and may represent short-term sentiments rather than long-term valuations that relate directly to the firm's prospects in the future.

**Table 4.** The Statistical Test of ACAR for Non-Issuers

Period	ACAR	t-Value	Description
t-10	-0.0005	-0.0915	Insignificant
t-9	0.0001	0.0189	Insignificant
t-8	0.0021	0.3021	Insignificant
t-7	0.0015	0.1996	Insignificant
t-6	0.0022	0.2865	Insignificant
t-5	0.0049	0.5973	Insignificant
t-4	0.0059	0.6978	Insignificant
t-3	0.0041	0.4669	Insignificant
t-2	0.0047	0.5202	Insignificant
t-1	0.0056	0.6039	Insignificant
t0	0.0065	0.6863	Insignificant
t+1	0.0070	0.7214	Insignificant
t+2	0.0079	0.7960	Insignificant
t+3	0.0064	0.6324	Insignificant
t+4	0.0063	0.6150	Insignificant
t+5	0.0095	0.9089	Insignificant
t+6	0.0100	0.9430	Insignificant
t+7	0.0098	0.9080	Insignificant
t+8	0.0087	0.7947	Insignificant
t+9	0.0064	0.5760	Insignificant
t+10	0.0059	0.5278	Insignificant

Table 4 presents the results of the statistical test of the average cumulative abnormal return (ACAR) for non-issuers in the corresponding industry. Table 4 indicates that only one day in the course of 21 window periods has a negative ACAR and 20 days have a positive ACAR. The highest ACAR is at t+6 (0.0100). Unfortunately, none of the ACARs is significant during the window periods. This insignificance is probably due to a small variation of ACARs during the window periods (See Figure 2). This pattern is slightly different from the testing results of issuers' ACAR in Table 3.

**Discussion.** The test results in Table 3 and Table 4 indicates that the movement of the average cumulative abnormal return (ACAR) of the issuers is not in line with the movement of ACAR of non-issuers. Although the positive ACAR was found at t0 to t+4 for issuers, which indicates a positive response to the companies issuing rights, this pattern of return does not seem to affect other companies in the industry, with the rather flat, random, and insignificant movement of returns.

The results of this study are slightly different from the results of research conducted by Dewi and Putra (2013) and Kusuma and Suryanawa (2015) that did not find a significant return around the right issues. The results of this study also have a slightly different pattern from that found by Catranti

(2009) which identifies the significance of negative abnormal return at  $t+1$  after cum date (ex-date). Even so, the findings of Catranti (2009) also confirm a positive pattern of AAR after ex-date, although not significant, which means that it shares a similarity to the findings in this study. This difference in results may be triggered by differences in the different observation periods which led to the different market and risk structures over time.

Bestari (2015) states that the unsustainability of abnormal return patterns does not really correspond with the signalling theory, which suggests that the right issues may be accepted by the market as a signal that can affect the company's prospect in the future. The existence of a short-term positive return for issuers ( $t_0$  to  $t+4$ ), as found in this study, seems to be more of a reflection of the undervaluation of offered price of right issues which is generally lower than the stock market price (Bestari, 2015).

This assumption is strengthened by the inexistence of intra-industry spillovers, both in term of contagion and competitive, for non-issuing companies in the same industries. When investors perceive that right issues contain long-term information that is directly related to the prospect of the issuers in the future, for the commonality reasons (Schipper, 1990), there is a possibility that investors will also transform that information to the industrial level so that the possibility of intra-industry effects will be more visible. Unfortunately, this study failed to prove this presumption.

The findings of this study are in contrast to the results of the Szewczyk (1992), Slovin *et al.* (1992), and Bradley and Yuan (2013) studies that confirmed the transfer of intra-industrial information for seasoned equity offerings. Substantively, our findings are in line with the findings of Norhamida (2006) and Saputra (2015) previously conducted in Indonesia which also exhibit no pattern of intra-industry spillovers. This result seems to indicate that the intra-industry spillover issue following right offerings in emerging markets such as Indonesia is not very suitable to be approached using a short-term timeline. The high noise and market inefficiency in developing countries may cause investors' perceptions toward the risks and the effectiveness of additional capital generated from the offerings to be priced more slowly than expected. In fact, the suspicion of intra-industry spillovers following right issues based on the arguments about risk communality among companies in the industry. Therefore, it may be better to approach the issue of information spillovers following right offerings with a longer time horizon. This is so considering that Rafik and Azmi (2019) have succeeded in proving the underperformance of issuing firms in the long term, of up to three years post-right issues.

## CONCLUSION

In general, this study successfully proved the existence of a positive market response around the right issues, which lasted up to 4 days after cum-date. This short-term reaction for the issuers' stock prices is not contagious to the non-issuers' stock prices, for both contagion and competitive effects. The average cumulative abnormal return between issuers and non-issuers is randomly patterned and does not appear to be related to each other. In other words, the intra-industry spillovers on the right offering was not proven in this study.

In addition to lengthening the time horizon for the observation, it is possible to draw several considerable points to improve the results of the issue for future betterment. First, it is advised that future researchers classify the right issues based on the objectives or motivation underlying the offers. In addition, it is also recommended to make categorization based on the presence or absence of warrants following the right issues. Such categorization is expected to result in a more holistic and comprehensive conclusion in relation to the net actual response of the market to the seasoned equity offerings such as right issues. Furthermore, as a topic enrichment, future researchers are expected to

compare market responses to various forms of seasoned equity offerings such as right issues and private placement.

Second, it is recommended that the upcoming researchers take into account the specific factors considered to have an influence on stock price as the control variables in calculating returns. These factors can be based on the attributes inherent in the industry such as the level of industry concentration, or other attributes inherent in the company itself, such as company size, growth rate, company age, and the level of information asymmetry. The use of factor models such as 3-factor-model or 4-factor model in the abnormal return calculation is a fairly feasible alternative.

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