“Price reaction to rights issue announcements of family firms”

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PRICE REACTION TO RIGHTS ISSUE ANNOUNCEMENTS OF FAMILY FIRMS

Abstract

This study examines the effect of family control on the price reaction to rights issue announcements of publicly listed firms in Indonesia during the period of 2005–2018. The study uses agency theory, which discusses the conflict of interest between controlling/majority and non-controlling/minority shareholders. The results show that the price reaction to the right issue announcements for publicly listed firms in Indonesia is statistically significantly negative. The mean of cumulative abnormal returns (CAR) falls between –1.40% (for the Day 0 window period) and –3.43% (for the –5 to +5 window period). Further examination indicates that family control is associated with a more negative price reaction to these rights issue announcements. Specifically, for rights issue announcements of family firms, the mean cumulative abnormal returns (CAR) fall between –1.98% at announcement day (Day 0) and –5.23% for the event window period (–5 to +5). Meanwhile, for rights issue announcements of non-family firms, the current study found statistically insignificant price reactions to rights issue announcements for all the event window periods. These findings suggest that investors perceive higher agency problems among family firms where the family controlling shareholders tend to misuse and tunnel the rights issue funds for their own private benefit.

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Keywords rights issue announcements, price reaction, family firms, tunneling, agency theory

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INTRODUCTION

This study examines how family control affects the price reaction to the rights issue announcements of publicly listed firms. Family firms are one of the most common forms of business organization worldwide. Since the 1980s, family firms have begun to be widely researched. The main question for scholars is whether family firms differ from non-family firms in key aspects and how they make business decisions. Previous studies on family firms have examined such aspects as management, finance, ownership and corporate governance. One aspect, however, that has not been widely researched is whether the price reaction to the rights issue announcement is different for family and non-family firms.

The rights issue is widely used by publicly listed firms in many countries to raise funds when they need cash for various objectives such as acquisition, business expansion, capital adequacy. The process generally needs approval from firm shareholders. The finance literature suggests that investors in the stock market react either positively or negatively to the announcement of a company's rights issue (i.e., Kang & Stulz, 1996; Tan et al., 2002). Marisetty et al. (2008) further indicated that investors' reactions were more negative toward the announcement of the rights issue for family firms than for non-family firms. The authors find that investors believe that family controlling shareholders may misuse or tunnel the proceeds from the rights issue for

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their own private benefit, a view that is consistent with the tunneling hypothesis (Kim & Purnanandam, 2006; Johnson et al., 2000; La Porta et al., 1999; Claessen et al., 2000).

The majority of publicly listed firms on the Indonesia Stock Exchange are controlled by families. Indeed, Masulis et al. (2011) indicated that family business groups control around 53 percent of the market capitalization of the Indonesian publicly listed firms. Claessens et al. (2000) further suggested that pyramid structure is significantly prevalent in Indonesia. This scenario potentially causes differences in cash-flow and control rights, which in turn can lead to minority shareholder expropriation. Meanwhile, extant studies on price reactions to rights issue announcements in Indonesia had offered conflicting or insignificant results (i.e., Safitri, 2000; Retmono, 2015; Prasetyo, 2006). Indeed, there is no previous study that examines the effect of family control on the rights issue announcements of Indonesian publicly listed firms. Therefore, more study needs to be carried out related to the rights issue announcements of publicly listed family firms in Indonesia.

1. LITERATURE REVIEW AND HYPOTHESIS DEVELOPMENT

1.1. Price reactions to rights issue announcements

Rights issues are a mechanism used by public companies around the world to get fresh funds. Indeed, rights issues are one of the most popular methods used to increase company equity in different countries. Examples can be found in Balachandran et al. (2008) in Australia, Wang et al. (2006) in China, Salamudin et al. (1999) in Malaysia, Slovin et al. (2000) in the United Kingdom, and Tan et al. (2002) in Singapore.

The finance literature suggests that investors in the stock markets will react to strategic corporate action announcements, such as rights issues. It is well documented that in the United States, investors in the stock market almost always react negatively to the rights issue announcements. For example, Barclay and Litzenberger (1988) indicated that stock prices tend to decrease when companies announce rights issues. Ching and Rui (2006) examined insider trading around rights issue announcement in Hong Kong. The authors found that the announcements of right offerings are associated with negative abnormal returns.

Marsden (2000) examined price reactions to rights issue announcements in New Zealand for the period of 1976 to 1994. The study found a negative price reaction to rights issue announcements, and the price reaction was more negative for underwritten and larger firms. The author claims that the study result supports asymmetric information and the signaling hypothesis. Suthiono and Atmaja (2019) examined price reactions to right issues announcement in Indonesia. Using a sample data from 1991 to 2016, the study found statistically significant negative abnormal returns for several event window periods.

Few theories can explain the negative reaction of investors to the announcement of a company's rights issue. Under asymmetric hypothesis, the existence of asymmetric information between managers and shareholders can make rights issue actions a negative signal (Myers & Majluf, 1984). Managers are considered to have more information about the company than investors, therefore investors may see the rights issue as an indicator that a firm's shares are overpriced.

Under the agency theory perspective, rights issues could be value destruction to shareholders if there was a conflict of interest between its management and shareholders (Jensen & Meckling, 1976). If investors perceive funds from the rights issue can be misused or tunnelled by management or controlling shareholders, then they will react negatively to any right issue announcements (Johnson et al., 2000; Kim & Purnanandam, 2006).

On the other hand, there are several arguments that explain why investors positively react to the rights issue announcement. For example, Tan et al. (2002) indicated that price reaction to the rights issue announcements is positive if investors have

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information that the funds from the rights issue are used for new investments that promise larger profits. Salamudin et al. (1999) further show that if the rights issue is carried out when economic conditions are good, investor reactions to the rights issue announcement tend to be positive. Positive market reaction to the announcements of a right issue was also found by Kang and Stulz (1996) in Japan, Wang et al. (2006) in China, Tan et al. (2002) in Singapore, and Marisetty et al. (2008) in India for non-family firms, and Safitri (2000) and Retmono (2015) in Indonesia.

Insignificant price reactions to such rights issue announcements are also reported from several countries, including Indonesia (Solikhin, 2000; Prasetyo, 2006) and Norway (Bohren et al., 1997).

1.2. Family firms, agency theory and rights issues

Agency theory assumes that family firms have advantages when mitigating agency problems that arise due to the separation of ownership from company control. Family firms are a unique form of a company because they have individuals or families who hold large ownership. Since most of their wealth is invested in the company, family members usually sit on the Board of Directors. Thus, the possibility that the Board of Directors is acting to the detriment of the shareholders can be minimized. Thus, the principal-agent problems between shareholders and professional directors (Agency Problem Type I) tend to be relatively lower in family firms than in non-family firms.

On the other hand, large shareholdings in family firms and the presence of family members on the Board of Directors do give them strong control over the company. This control can lead to another agency problem. According to Villalonga and Amit (2006), family controlling shareholders can expropriate minority shareholders. Controlling families, for example, can make decisions that are more in their favor at the expense of minority shareholders. Thus, agency problems between controlling shareholders and minority shareholders (Agency Problem Type II) can be even bigger than Agency Problem Type I.

In addition, Villalonga and Amit (2006) argue that controlling families can enjoy a less diluted private benefit of controls than other types of controlling or large shareholders, such as government or institutions. This argument may suggest that controlling families have greater incentives to expropriate minority or non-controlling shareholders. Private benefits of control are generally defined as the economic gain from exerting control on a company by majority or large shareholders at the expense of minority or non-controlling shareholders (Jensen & Meckling, 1976; Bebchuk & Kahan, 1990; Johnson et al., 2000). Private benefits of control stem from tunnelling of non-controlling or minority shareholders through transactions that are intended primarily to benefit controlling shareholders. Examples are sales of firm's assets and transfer pricing that only benefit controlling families, excessive compensations for controlling families who serve as Board of Directors of the company, and loan guarantees. Private benefits of control can also stem from non-asset transfers, such as insider trading, discrimination transactions, and acquisitions.

Extant research on family firm performance offers mixed results. For example, Anderson and Reeb (2003) and Villalonga and Amit (2006) found that family firms generally have better performance than non-family firms. On the other hand, in Australia, Setia-Atmaja et al. (2009) found that family firms underperform non-family firms. In Indonesia, Suyono (2018) and Prabowo and Simpson (2011) reported that family firms also underperform non-family firms, especially when the controlling families are very active in the firm's decision-making process.

One form of expropriation of minority shareholders by controlling shareholders is tunneling. As defined by Johnson et al. (2000), tunneling is the transfer of resources out of the company for the benefit of the controlling shareholders. Controlling family shareholders have an incentive to conduct tunneling if they have greater control rights than cash flow rights in the company. Controlling families may transfer assets or profits from their company to a company where they have cash flow rights that are greater than control rights (Faccio et al., 2001). This transfer can be carried out through the use of a controlling-mi-

nority structure, such as pyramid structures (La Porta et al., 1999). Claessens et al. (2000) defined a pyramid structure as owning a majority of the shares of a company, which in turn holds a majority of the shares of another company. This process can also be repeated many times.

For example, suppose that Shareholder A owns 70% of Company X's shares, which in turn holds 60% of Company Y's shares. Then A's cash flow rights in Company Y is 42% (i.e., 60% of 70%), while his voting rights in Company Y are 60%. Shareholder A can tunnel resources from Company Y to company X, since he can control Company X, which in turn can control Company Y. It can be seen that the difference between cash flow rights and voting rights provide an opportunity for controlling or majority shareholders to expropriate minority shareholders.

Suppose Firm Y is a coal mining company and its coal inventory value increases by 100 million dollars due to coal price increase. Firm X that owns 60% share will gain 60 million dollars, while non-controlling or minority shareholders of Firm Y will gain 40 million dollars. Since Shareholder A owns 70% share of Firm X, he will obtain 42 million dollars of this value increase. However, Shareholder A can control the Board of Directors of Firm Y since he controls the Board of Directors of Firm X. Shareholder A can order the Board of Directors of Firm Y to sell the coal inventory to Firm X at its previous price so that Firm X can get all the additional 100 million dollars. It also means that shareholder A can obtain 60 million dollars instead of only 42 million dollars, and the non-controlling or minority shareholders of Firm Y gain nothing.

In the context of family firms, rights issues can be viewed as a bad thing if investors doubt the honesty of the controlling families. Investors will be worried that controlling families will transfer or misuse funds from the rights issue for their own benefit. Indeed, Marisetty et al. (2008) found that market reactions to rights issue announcements in India were more negative for family firms than they were for non-family firms. The authors argued that family members who control the firm have motivation to enhance their own personal wealth at the cost of minority or non-controlling shareholders. Tunneling among family firms is prevalent in most Asian countries that have poor corporate governance systems. As such, investors in the capital market are aware of these potential agency conflicts between family controlling and minority shareholders, and the potential for the misuse of funds due to rights issues. Therefore, in general, they will react more negatively to the announcement of a family firm's rights issue. On the other hand, if investors in the stock market view the presence of controlling families on the Board of Directors as positive, they will react more positively to rights issues of family firms.

Based on a review of the related literature, this paper proposes the following hypotheses:

H1: Price reaction to the rights issue announcements is significantly negative.

H2: Price reaction to the rights issue announcements is more negative for family firms than for non-family firms.

2. STUDY SAMPLE AND RESEARCH METHODOLOGY

2.1. Study sample

This study obtained all of its data regarding the rights issue from Bloomberg. That group of data consists of rights issue announcements, daily closing stock price and the daily Indonesia Composite Index (IDX Index) during the period of January 2005 and December 2018. There are 293 rights issue announcements that occurred during that period. Eleven observations with incomplete rights issues announcement data were removed. Following Marisetty et al. (2008), this study removed 122 rights issue announcements, since the company stocks were not traded at least a half over days (-125 to +5) or at least on a day between day 0 and day +5 with respect to the announcement date. Table 1 shows the number of rights issue announcements used for this study. Of 160 rights issue announcements, 108 were conducted by family firms (67.5 percent).

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Table 1. Number of rights issues in Indonesia

Year	Number of Rights Issues	Family Firms	Non-Family Firms
2005	8	5	3
2006	8	8	0
2007	17	13	4
2008	4	4	0
2009	11	8	3
2010	11	8	3
2011	19	14	5
2012	4	2	2
2013	20	12	8
2014	2	0	2
2015	8	5	3
2016	26	13	13
2017	11	7	4
2018	11	9	2
Total	160	108	52

The current study defines family firms as firms that have family or individual control with a minimum of 35% shareholding. La Porta et al. (1998) suggested that at least 20% of the voting rights threshold is required to control a firm. In Indonesia, takeover regulation requires 35% of the voting rights threshold. As such, this study uses this number. If a firm is controlled by a corporation, this study traces back its ownership. For instance, if Firm X is controlled by Firm Y, then this study traced the controlling shareholder of Firm Y. If Firm Y has family or individual holding at least 35% of the shareholding, it is categorized in this study as a family firm. If Firm Y has no family or individual holding at least 35% of the shareholding, it is categorized in this study as a non-family firm.

For example, in 2007, the shareholder list of PT. Charoen Popkhand Indonesia, Tbk indicated that the largest shareholder of PT. Cipta Pertiwi owned 55.34% of the company shares. This study traced who controls PT. Cipta Pertiwi. Its prospectus revealed that the Jiavaranon family owns the majority of the company shares. Therefore, this study categorized PT. Charoen Popkhand Indonesia, Tbk as a family firm.

Another example was in 2009 PT. AKR Corporindo, Tbk was controlled by PT. Arthakencana Rayatama which holds 59.60% of the company shares. Further research reveals that PT. Arthakencana Rayatama was actually controlled by the family of Soegiarto Adikoesoemo and Haryanto Adikoesoemo. Therefore, PT. AKR Corporindo, Tbk is categorized as family firm.

In some cases, this study has to trace back firm's ownership several layers to find out firm's ultimate shareholders. For instance, in 2006 the shareholder list of PT. Bank Pan Indonesia, Tbk indicated that PT. Panin Financial, Tbk was the largest shareholder holding 46.04% of company shares. Further research reveals that the majority of PT. Panin Financial, Tbk shares was owned by other publicly listed firm, PT. Panin Invest, Tbk. The list of shareholders of PT. Panin Invest, Tbk revealed that it had two large shareholders: PT. Paninkorp that owned 29% of the company shares and PT. Famlee Invesco that owned 19% of the company shares. PT. Paninkorp was controlled by PT. Panin Investment that actually controlled by Mu'min Gunawan who also hold the majority of PT. Famlee Invesco shares. Thus PT. Bank Pan Indonesia, Tbk is categorized as family firm.

The final example was in 2009, the shareholder list of PT. Bank Danamon, Tbk revealed that the largest shareholder of Asia Financial (Indonesia) Pte. Ltd. owned 67.37% of the company shares. Asia Financial (Indonesia) Pte. Ltd. was actually controlled by Temasek Holdings, an investment company owned by Singapore government. As such, PT. Bank Danamon, Tbk is defined as non-family firm.

2.2. Study methodology

To examine hypotheses H1 and H2, this study used an event study methodology developed by Brown and Warner (1980). This method was also used by Suthiono and Atmaja (2019) in the price reaction to rights issue announcement study in Indonesia. The abnormal return for a given stock for any time period t is calculated using the following formula:

$$AR_{it} = R_{it} - E(R_{it}), \quad (1)$$

where t = the day measured relative to the event date (or t = 0), AR_{it} = abnormal return for stock i at time t, R_{it} = the actual return for stock i at time t, $E(R_{it})$ = the expected return for stock i at time t.

The expected return of a stock, $E(R_{it})$, was estimated using an Ordinary Least Squares (OLS) market model. This study then compared the expected return with the actual expected return, R_{it}. This study utilized 120 trading days (-125, -6) for the estimation period (Campbell et al., 1997) and the Indonesia Composite Index (IDX Index) as the market proxy for this model as shown below:

$$E(R_{it}) = \alpha_i + \beta_i R_{mt} + \varepsilon_{it}. \qquad (2)$$

In the Indonesia Stock Exchange, there are many "sleeping" or illiquid stocks and this circumstance can lead to biased research. Therefore, to overcome this issue, this study adopted Scholes and Williams's method (1977) by calculating beta coefficient using the following formula:

$$\beta_i = \frac{\sum \left(R_{it}\, R_{m3t}\right) - (1/n)\left(\sum R_{it}\right)\left(\sum R_{m3t}\right)}{\sum \left(R_{mt}\, R_{m3t}\right) - (1/n)\left(\sum R_{mt}\right)\left(\sum R_{m3t}\right)}, \qquad (3)$$

where R_{it} = log of (1 + return for security i on day t), R_{mt} = log of (1 + value-weighted market return on day t), $R_{m3t} = R_{mt-1} + R_{mt} + R_{mt+1}$ (a 3-day moving average market window), n = number of days in the estimation period.

This study further calculated Cumulative Abnormal Returns and Cumulative Average Abnormal Returns during the window periods, respectively, using the following formulas:

$$CAR_i\left(t_1, t_2\right) = \sum_{t_1}^{t_2} AR_{it}, \qquad (4)$$

$$CAAR\left(t_1, t_2\right) = \frac{1}{n} \sum_{t_1}^{t_2} CAR_{it}, \qquad (5)$$

where n is the number of securities in the sample.

This study tests Cumulative Abnormal Return significance using Brown and Warner's (1980) standard t-test procedure as follows:

$$T_{Stat} = \frac{CAAR\left(t_1, t_2\right)}{\sigma_{CAAR(t_1, t_2)}}, \qquad (6)$$

where

$$\sigma_{CAAR(t_1,t_2)} = \sqrt{\frac{1}{N(N-d)} \sum_{i=1}^{N} \left(CAR_i\left(t_1, t_2\right) - CAAR\left(t_1, t_2\right)\right)^2}, \qquad (7)$$

3. RESULTS AND DISCUSSION

Table 2 presents the average cumulative abnormal returns (CAR) across firms around several announcement day event-window periods. The average cumulative abnormal returns (CAR) for all event window periods were negative for all rights issue announcements. Specifically, this study found that the mean cumulative abnormal return (CAR) was –1.40% and significantly different from zero at the 1% level of the announcement day (Day 0). The mean CAR around the event window periods (0 to +2), (–3 to +3), (–2 to +2) were –2.21%, –3.14%, and –2.59%, respectively, and also statistically significant at the 1% level. Moreover, for the event window periods (0 to +1), (–5 to +5), (–4 to +4), and (–1 to +1), the mean CAR was –1.80%, –3.43%, –3.08%, and –1.76% respectively, and significantly different from zero at the 5% level. Overall, there was strong evidence to support H1 and conclude that the market reactions to the rights issue of Indonesian publicly listed firms were negative.

The finding is consistent with previous studies around the world such as Barclay and Litzenberger (1988) in the U.S, Levis (1995) in the U.K., Marsden (2000) in New Zealand, Ching and Rui (2006) in Hong Kong, and Suthiono and Atmaja (2019) in Indonesia. Under signaling theory, the finding is in line with the notion that investors in the Indonesian stock market may perceive the rights issue as a signal that a firm's shares are overpriced due to the existence of asymmetric information between managers and shareholders (Myers & Majluf, 1984). Another possible explanation for the finding is that investors in the Indonesian capital market prefer to use debt financing over equity as the use of debt may enhance tax saving (DeAngelo & Masulis, 1980). Meanwhile, under agency theory or tunneling hypothesis, the negative reaction to the announcements of rights issue may stem from the fact that investors in the Indonesian capital market perceive funds from the rights issue can be misused by management or controlling shareholders (Kim & Purnanandam, 2006). This study attempts to further examine this argument by comparing samples of family and non-family firms.

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Table 2. Cumulative abnormal returns around rights issue announcements: All firms

	(0)	(0,+1)	(0,+2)	(–5,+5)	(–4,+4)	(–3,+3)	(–2,+2)	(–1,+1)
Mean CAR	–1.4***	–1.8**	–2.21***	–3.43**	–3.08**	–3.14***	–2.59***	–1.76**
t-statistic	–2.77	–2.61	–2.80	–2.58	–2.47	–2.93	–2.72	–2.24
% Negative CAR	60.63%	56.25%	55.00%	59.38%	59.38%	61.88%	56.25%	58.13%

Note: ***, **, and * mean significant at 1%, 5%, and 10%, respectively.

Table 3. Cumulative abnormal returns around rights issue announcements: Family firms

	(0)	(0,+1)	(0,+2)	(–5,+5)	(–4,+4)	(–3,+3)	(–2,+2)	(–1,+1)
Mean CAR	–1.98***	–2.81***	–3.18***	–5.23***	–4.41***	–4.49***	–3.63***	–2.88***
t-statistic	–2.91	–3.17	–2.95	–2.98	–2.72	–3.32	–2.99	–3.05
% Negative CAR	59.26%	54.63%	56.48%	61.11%	59.26%	64.81%	57.41%	60.19%

Note: ***, **, and * mean significant at 1%, 5%, and 10%, respectively.

Table 4. Cumulative abnormal returns around rights issue announcements: Non-family firms

	(0)	(0,+1)	(0,+2)	(–5,+5)	(–4,+4)	(–3,+3)	(–2,+2)	(–1,+1)
Mean CAR	–0.21	0.28	–0.21	0.32	–0.32	–0.35	–0.42	0.57
t-statistic	–0.32	0.26	–0.22	0.15	–0.16	–0.19	–0.27	0.40
% Negative CAR	63.46%	59.62%	51.92%	55.77%	59.62%	55.77%	53.85%	53.85%

To test Hypothesis H2, this study divided all rights issues announcements into two categories: (1) rights issue announcements that come from family companies and (2) rights issue announcements from non-family companies. There were 108 rights issue announcements related to family companies and 52 right issue announcements related to non-family firms (see Table 1). Table 3 presents the average cumulative abnormal returns (CAR) across family firms around several event-window periods. This study found that the mean CAR was significantly negative at a 1 percent level for all event window periods. The minimum mean CAR was also –1.98% at the day of the rights issue announcement (Day 0), and the maximum mean CAR was –5.23% at the event window period (–5 to +5).

Table 4 presents the average cumulative abnormal returns (CAR) across non-family firms around several event-window periods. This study found that the mean CAR was statistically insignificant for all event window periods. When combined, the results in Table 3 and Table 4 support H2 and conclude that the market reactions to the rights issue of Indonesian publicly listed firms were more negative for family firms than non-family firms. Indeed, the negative price reaction to the rights issue announcements found in the full sample analysis was derived from a family firm sub-sample. The finding is consistent with Marisetty et al. (2008) who found that investors' reactions were more negative toward the announcement of the rights issue for family firms than for non-family firms in India.

These study results are also consistent with the argument of investors' perception that funds from the rights issue can be misused or tunneled by management or controlling shareholders may lead to negative reaction to rights issue announcements (Kim & Purnanandam, 2006; Johnson et al., 2000; La Porta et al., 1999). Indeed, the prevalence of pyramid structure that may enhance tunneling in Indonesia supports this study finding (La Porta et al., 1999; Claessen et al., 2000).

CONCLUSION

This study examines how family control affects price reaction to the rights issue announcements of publicly listed firms in Indonesia. Using the event study method, this study found several important results. First, there is strong evidence that investors in the Indonesia Stock Exchange react negatively to the announcements of rights issues. Therefore, it can be concluded that (1) due to asymmetric informa-

tion between a firm's management and shareholders, the rights issue may be perceived as a signal that a firm's shares are overpriced, and (2) investors in the stock market perceive that rights issue funds can be misused or tunneled by management or controlling shareholders. Second, there is strong evidence that investor reactions to the rights issue announcements of family firms are significantly negative. This study also found statistically insignificant market reactions toward non-family firms' rights issue announcements for all the event window periods.

Putting these results together, it can be concluded that investors perceive higher agency problems among family firms where family controlling shareholders tend to misuse and tunnel the rights issue funds for their private benefit. These results are consistent with the fact that pyramid structure is prevalent in Indonesia and can create in particular more severe agency problems between the majority or controlling shareholders and the minority or non-controlling shareholders in family firms.

AUTHOR CONTRIBUTIONS

Conceptualization: Lukas Setia-Atmaja.
Data curation: Lukas Setia-Atmaja.
Formal analysis: Lukas Setia-Atmaja, Henry Suthiono.
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Writing – original draft: Lukas Setia-Atmaja, Henry Suthiono.
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