

The Return on IPO Stocks during the COVID-19 Pandemic in Indonesia

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Abstract. *Conducting an initial public offering (IPO) during the COVID-19 pandemic is not easy due to the current high level of economic uncertainty. This study aims to examine the effect of the COVID-19 pandemic on the initial return on IPO shares in Indonesia. In the study, a cross-sectional regression was applied, using a sample of 51 companies that conduct IPOs. It was found that the fear index over the COVID-19 pandemic negatively affected the initial return. The higher the fear index, the lower the return on IPO stocks on the first listing day. The results therefore demonstrate that the fear of COVID-19 influenced the IPO market return in Indonesia. This study extends the literature on the COVID-19 pandemic, especially on the initial return on IPOs. Practically, this research also provides insight into the issuers regarding the appropriate timing of IPOs during the crisis, particularly for investors who wish to buy IPO shares during an uncertain time. Policymakers are expected to mitigate the cases and deaths of COVID-19 in Indonesia, which may reduce investors' fear related to COVID-19. This paper's limitation is that it only examines data from 2020, as this was the year in which COVID-19 first announced. Future research could include the short-term and long-term performance of IPOs, and also broaden the sample area to a larger region.*

Keywords: *Initial return, IPO, COVID-19, fear index, Indonesia.*

Abstrak. *Melakukan penawaran saham perdana (IPO) pada masa pandemi COVID-19 tidaklah mudah karena pada masa ini memiliki ketidakpastian ekonomi yang tinggi. Penelitian ini bertujuan untuk melihat pengaruh pandemi COVID-19 terhadap tingkat pengembalian awal saham yang melakukan IPO di Indonesia. Penelitian ini menggunakan regresi cross-sectional, dengan menggunakan sampel dari 51 perusahaan yang melakukan IPO. Penelitian ini menemukan bahwa indeks kepanikan atas pandemi COVID-19 mempengaruhi tingkat pengembalian awal secara negatif signifikan. Hasil penelitian menunjukkan bahwa indeks kepanikan atas pandemi COVID-19 menghambat pengembalian pasar IPO. Semakin tinggi tingkat indeks kepanikan atas pandemi COVID-19 maka semakin rendah tingkat pengembalian saham IPO pada hari pertama memasuki bursa. Penelitian ini mengembangkan literatur penelitian tentang pandemi COVID-19, terutama terhadap tingkat pengembalian awal IPO. Secara praktik, penelitian ini juga memberikan wawasan terhadap perusahaan atas waktu yang tepat untuk IPO bila terjadi krisis dan untuk investor yang ingin membeli saham IPO pada masa yang sedang tidak pasti. Para pembuat kebijakan diharapkan dapat memitigasi kasus dan kematian COVID-19 di tanah air untuk mengurangi kepanikan investor terkait COVID-19. Keterbatasan tulisan ini yaitu hanya mengkaji data tahun 2020 saat tahun pertama kali diumumkannya COVID-19. Ruang lingkup peneliti masa depan dapat mencakup kinerja IPO jangka pendek dan jangka panjang, dan juga memperluas sampel ke wilayah yang lebih besar.*

Kata kunci: *Pengembalian awal, IPO, COVID-19, indeks kepanikan, Indonesia.*

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Introduction

Capital is essential for firms to achieve their goals. However, many firms experience difficulties in obtaining capital. While firms can borrow funds from a bank or issue bonds, they can also offer stock by issuing an Initial Public Offering (IPO). This can be beneficial for many parties, including issuers and investors. While issuers focus on raising funds for IPOs, investors, especially short-term investors, focus on returns, particularly initial returns. These initial returns can involve overpricing, true pricing, and underpricing. Usually, the stock offered by firms underpriced, while there is a positive difference between the price recorded on the secondary market on the first day of listing and the offer price in the IPO (Visconti, 2021). Asymmetrical information explains the underpricing of stocks, and it has increased during this uncertain time due to COVID-19. Issuing IPOs in a crisis period is challenging (Tupper, 2016).

The challenges experienced by almost every country worldwide in 2020 were unprecedented. The COVID-19 pandemic was a major shock to human life and the economy. It cannot be denied that the first case of COVID-19 in almost each country created panic and fear. The outbreak of COVID-19 forced governments to embark on rapidly designed public policies, and to decide, under immense pressure, which venues should be allowed to remain open (Manderson & Levine, 2020). For example, in Indonesia, the government decided to close schools from March 6th 2020 and suggested that firms limit their business activities; on April 10th 2020, social restrictions were enforced in the Jakarta region, before extending to the rest of the country. These policies limited normal activities. Despite their aim of mitigating the spread of COVID-19, the increased intensity of social restrictions exerted a negative impact on stock-market returns (Iriansyah & Hanggraeni, 2021) and economic growth (Kumar, 2021), leading to fear among investors (Salisu & Akanni, 2020), who were more concerned about their livelihoods and less with their welfare (Naseem et al., 2021).

Moreover, after more than two years, the pandemic has still not ended. The universal economic collapse The COVID-19 pandemic (Goyal & Manu, 2021) has given rise to the following questions: Why do firms feel confident to issue IPO while the outbreak takes place worldwide? Will investors obtain high initial returns in this period? Does COVID-19 affect these initial returns?

The impact of COVID-19 on firm performances has been examined in previous studies (Mazumder & Saha, 2021; Mazur et al., 2021), as was the impact of the pandemic stock-market returns (Salisu & Akanni, 2020; Smales, 2021; Tissaoui et al., 2021). Furthermore, IPO firms are more sensitive to uncertainty, and it was found that COVID-19 influenced the returns of IPO firms (Baig & Chen, 2021; Goyal & Manu, 2021; Kuswanto, 2021; Mazumder & Saha, 2021; Visconti, 2021). In particular, studies found that COVID-19 influenced the stock returns of IPOs in India (Goyal & Manu, 2021) and the initial returns of IPOs in the US (Baig & Chen, 2021; Mazumder & Saha, 2021).

Indonesia was significantly affected economically by the COVID-19 pandemic. According to a BPS (Badan Pusat Statistik, 2020) survey, in general, 8 out of every 10 companies experienced a decline in revenue, specifically 84.2% of micro and small businesses and 82.29% of medium and large businesses. Further, there was negative GDP growth in the second quarter of 2020, which continued into the third and fourth quarters. Indonesia also experienced its lowest IHSG price since the global financial crisis of 2008, at Rp. 3,937.63, on March 24th, 2020. While the stock market is sluggish, IPOs are still run. This confidence may have arisen due to the significant increase in the number of IPO firms since 2017 in Indonesia (Kuswanto, 2021).

This research has poses two questions. First, what was the relationship between the total cases and deaths and the fear index related to the COVID-19 pandemic in Indonesia in 2020? To answer this question, this research

employs descriptive statistics. Second, what is the relationship between the fear of the COVID-19 pandemic and the initial returns of IPO firms in Indonesia in 2020? To answer this question, this research applies multiple regression. This research aims to extend the previous studies on IPO performance, specifically during the COVID-19 pandemic. Furthermore, this research is expected to provide practical insights to issuers regarding the successful timing of IPO. This should benefit companies seeking funding and investors purchasing IPO stocks during this uncertain time.

Visconti (2021) found a high initial return in the healthcare sector in NASDAQ. On the other hand, Kuswanto (2021) stated that Indonesia still features underpriced stocks. Baig and Chen (2021) and Mazumder and Saha (2021) found higher initial returns in US companies. These studies provided insights for investors to gain profits from IPO companies and for companies to issue IPOs. However, the question of whether COVID-19 influenced these initial returns remained unanswered. Goyal and Manu (2021) found that the deaths caused by COVID-19 influenced the returns of IPO firms in India; however, the other factors, such as new confirmed cases, new confirmed deaths, total cases, and the lockdown period did not. Mazumder and Saha (2021) found that fear of COVID-19 negatively affected the initial returns of IPO firms in the US.

Furthermore, Baig and Chen (2021), who extended the study by Mazumder and Saha (2021) with a larger dataset, found that COVID-19, a dummy variable of COVID-19, the average confirmed cases, the average confirmed deaths, the average containment health index, and the average stringency index had a positive impact on initial returns. Since these earlier studies found an effect of the COVID-19 pandemic, this study argues that COVID-19 also influenced the initial returns in Indonesia, as the firms still decided to pursue IPOs in this period.

This study uses the fear index as a proxy for the COVID-19 pandemic, as applied by Mazumder and Saha (2021) and Salisu and Akanni (2020), as it considers the total cases and deaths, as well as the incubation period, in one index. This fear index concerns about the severity of the COVID-19 pandemic. Therefore, this study predicts that:

Hypothesis 1: The higher the fear index of COVID-19, the lower the initial return of IPO companies.

The rest of the paper is organized as follows. The research methodology section describes the research method and data collection. The result and discussion section presents the findings of this research and offers a discussion. The conclusion section presents the conclusions of the study.

Research Methodology

Initial return

After an IPO, stock prices tend to rise to levels that are higher than normal before readjusting to their average level as a result of investors' overreactions at the time of the announcement of the event (Tıtan, 2015). Generally, investors gain the highest returns on IPO stocks on the first day on which they are listed on the secondary market; these returns are known as initial returns (Madyan et al., 2020). To calculate the initial return (IR), this research uses the following formula:

$$IR_i = \frac{C_{Pi} - O_{Pi}}{O_{Pi}}$$

where C_{Pi} represents the first day's closing price on the exchange and O_{Pi} is the IPO price.

Fear Index

The rapid spread of the COVID-19 pandemic cases caused general panic. The increasing number of reported cases and deaths has generated fear among investors because of the threat it poses to people's health and livelihoods, and global economic activity (Salisu & Akanni, 2020).

Information on fear is crucial for policymakers, since it might be one of the motivations for making decisions for the country's economy and how to restrain the spread of the virus. The fear index was first constructed by Salisu and Akanni (2020). Since the fear index combines the information on reported cases and reported deaths in one rate, it includes the incubation period in the calculation. Therefore, this study proposes that the fear index is a suitable measurement of COVID-19.

The fear index (FI) is calculated by equal weights of the reported-cases index (RCI) and the reported-deaths index (RDI). This study examines the lag day of the fear index. The formula of the fear index is:

$$FI = 0.5(RCI_t + RDI_t)$$

where RCI_t denotes the reported cases index for period t and RDI_t denotes the reported-deaths index for period t . The calculation of the RCI is:

$$RCI_t = \left(\frac{c_t}{c_t + c_{t-14}} \right)$$

where c_t is the total number of COVID-19 reported cases at time t and c_{t-14} is the number of COVID-19 reported cases at the beginning of the incubation period. Furthermore, the reported-deaths index is calculated by the formula:

$$RDI_t = \left(\frac{d_t}{d_t + d_{t-14}} \right)$$

where d_t is the total number of COVID-19 reported deaths at time t and d_{t-14} is the number of COVID-19 reported deaths at the beginning of the incubation period.

Model construction

The model of this study was constructed from the data of all 51 IPO firms on the Indonesian Stock Exchange in 2020. The secondary data from IDX, Refinitive, Bloomberg, Investing, and OurWorldinData's database were collected.

The data consisted of the firm's first-day-close price on IHSG, IPO price, total assets as of the end of 2019, tangible assets as of the end of 2019, net income as of the end of 2019, the market return on IHSG, the name of the underwriter, and the total cases and total deaths from COVID-19. To test the hypothesis H1, the following regression was run:

$$IR_i = \alpha_0 + \beta_1 FI_i + \beta_2 - 6 Controls_i + e_i$$

where, IR_i is the initial return of stock i , FI_i is the fear index of the COVID-19 pandemic, and $Controls_i$ represents the control variables of the model.

This study considers the issue-specific, firm-specific, and market-specific characteristics. The issue characteristics consist of price offering and underwriter reputation. This study uses the natural logarithm of the offer price. Lower offer prices cause the highest initial returns, since high-risk firms offer lower IPO prices to attract investors (Mehmood et al., 2021).

On the other hand, this model uses dummy variables for the underwriter. We used 1 for the underwriters listed among the best 20 underwriters for Indonesia Equity & Rights Offering FY 2019 by Bloomberg, namely UOB Kay Hian Pvt Ltd, Morgan Stanley, Indo Premier Securities, Credit Suisse, Deutsche Bank, UBS, Sinarmas Securities, NH Korindo Sekuritas Indonesia, Kresna Sekuritas, Nomura, MNC Securities, Jasa Utama Capital, Mirae Asset Daewoo Co Ltd, Trimegah Securities, Argonaut Ltd, HSBC, Erdikha Elit Sekuritas, Buana Capital, Aegis Capital Corp, and Investindo Nusantara Sekuritas, and 0 otherwise. The underwriter is an essential party during an IPO, since it must succeed in securing the IPO, including selling all shares and establishing low-level underpricing (Bandi et al., 2020).

Therefore, this research predicted that the underwriter's reputation would have a negative relationship with the initial return.

Firm characteristics consist of the asset value, return on assets, and tangible assets. We used a lagged year for firm characteristics, suggesting the asset value, the return on assets, and tangible assets before issuing the IPO. The natural logarithm of total assets measured the asset value. We predicted that the firm with the largest volume of total assets would attract investors. Return on assets (ROA) was measured by net income per total assets, reflecting the firm's ability to manage its assets to increase profits. The higher the ROA, the better the firm can utilize its assets (Bandi et al., 2020). This study suggests that higher ROA leads to higher initial returns. A tangible asset is measured by the total property/plant/equipment per total asset. Following Baig and Chen (2021), this study proposes that tangible assets positively affect initial return.

Market characteristics consist of the return of the market index of Indonesia, which is IHSG. We used the lag day of market return before the firms issued their IPOs. When the market is optimistic, it secures good returns (Rahman & Che-Yahya, 2019). Therefore, this study proposes that the market index and initial return have a positive relationship. The definition of each variable is presented in Table 1.

Table 1.
Definition of variables

Variab les	Definition	Unit
<i>Dependent Variable</i>		
IR	The return between the first day's close price in the secondary market and the price in the primary market	ratio
<i>Independent Variables</i>		
FI	The index of reported cases and the reported-deaths index of COVID-19 before the first trading day	ratio
<i>Issue-specific characteristics</i>		
UnRep	The dummy variable for the reputations of the underwriters	nomi nal
LnPoff	The natural logarithm of the price offered in the primary market	ratio
<i>Firm-specific characteristics</i>		
ROA	Net income per total assets at the end of 2019	ratio
Tan	Tangible assets per total assets at the end of 2019	ratio
LnAss	The natural logarithm of total assets at the end of 2019	ratio
<i>et</i>		
<i>Market-specific characteristic</i>		
MR	The return of IHSG before the first trading day	ratio

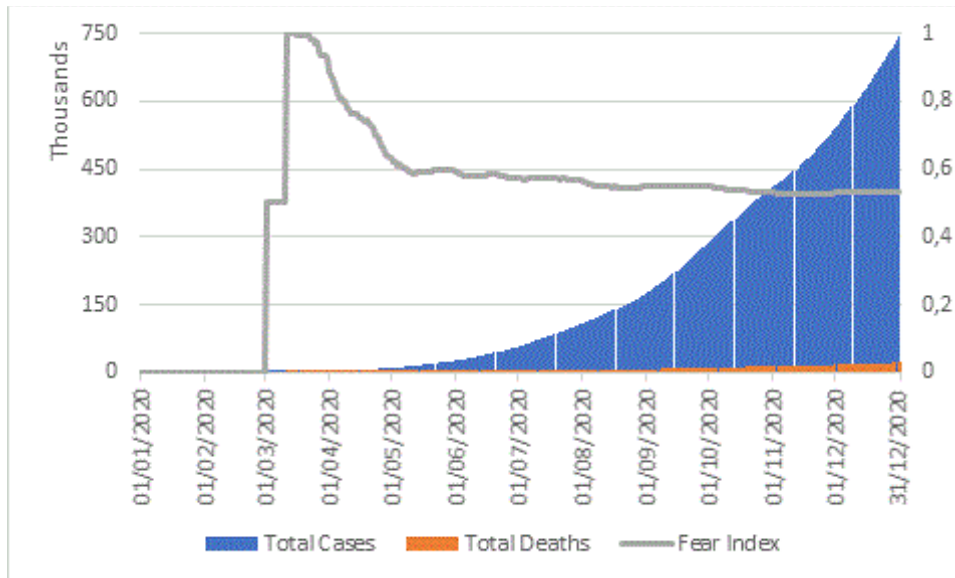


Figure.1
The condition of COVID-19 in Indonesia

Results and Discussion

The fear of COVID-19

Figure 1 shows the COVID-19 conditions in Indonesia. When the first cases were found on March 2nd, 2020, the social panic caused the fear index value to rise to 0.5. The reason the fear did not peak is that the individuals were considered likely to recover. However, the fear of the virus persisted because the virus was still thought likely to spread quickly after the first cases. Furthermore, only ten days after the first cases were confirmed, the government announced the first death from COVID-19. This event caused the fear index to peak at 1, or 100 percent. The total cases then increased to one hundred and fifty thousand on August 22nd, 2020, and almost seven hundred and fifty thousand cases were recorded by the end of 2020. Furthermore, the number of deaths from COVID-19 reached ten thousand on September 24th, 2020 and rose to twenty-two thousand at the end of 2020. However, unlike the total cases and deaths, which increased over time, the fear index peaked in the beginning of 2020, reaching 1, or 100 percent; it then decreased and became more stable, at around 0.53, at the end of 2020.

Descriptive Statistics

The descriptive statistics of the variables are presented in Table 2, below. On average, the initial return (*IR*), after the investors bought the IPO shares and sold them on the first day of listing, was 38.8%. The minimum value of the initial return was still positive, supporting previous studies (Kuswanto, 2021), which showed that IPO firms in Indonesia also experienced underpricing. The fear index (*FI*) was 0.458 on average, suggesting that the fear of COVID-19 in Indonesia was moderate. The COVID-19 condition (*Covid*) had a maximum value of 1 and a minimum value of 0, suggesting that this study included the period during which COVID-19 had not begun to spread. On average, the IPO price (*Poff*) was Rp. 382. While some firms used reputable underwriter services (*Unrep*), others did not. The IPO firms, on average, had total assets (*Asset*) of Rp. 672.6 billion, a 4.6% return on assets (*ROA*), and 32% of tangible assets (*TAN*). On the other hand, the condition of market return (*MR*) the day before their listing in the secondary market had a value of -0.4%, suggesting that the market was in decline.

Table 2.
Descriptive Statistics

Variables	Mean	Maximum	Minimum	Std. Dev.	n
IR	0,388	0,700	0,005	0,198	51
FI	0,458	1,000	0,000	0,309	51
Covid	0,725	1,000	0,000	0,451	51
Poff (Rp)	381,662	2,850,000	98,000	538,806	51
Unrep	0,588	1,000	0,000	0,497	51
Asset (Million Rp)	672.563,400	5.570.651,000	237,160	1.053.832,000	51
ROA	0,046	0,448	-0,541	0,147	51
TAN	0,320	0,984	0,001	0,287	51
MR	-0,004	0,033	-0,050	0,017	51

Notes: This table presents the statistics of the variables. *IR* denotes initial return, *FI* denotes the lag day of the fear index before listing in the secondary market, *Covid* denotes dummy for COVID condition. We used 1 for the companies listed after March 2nd 2020 and 0 otherwise. *Poff* denotes IPO prices offered by firms, *Unrep* denotes dummy for underwriter reputation. We used 1 for the underwriters listed among the best 20 underwriters for Indonesia Equity & Rights Offering FY 2019 by Bloomberg and 0 otherwise. *Asset* denotes the value of a firm's assets, *ROA* represents return on assets, *TAN* represents tangible assets, and *MR* denotes the lag day of market return before listing in the secondary market.

Table 3.
Correlation Of Variables.

	IR	FI	UnRep	LnPoff	ROA	Tan	LnAsset	MR
IR	1,000							
FI	-0,671	1,000						
UnRep	0,351	-0,293	1,000					
LnPoff	-0,011	-0,264	0,066	1,000				
ROA	0,192	0,008	-0,007	0,234	1,000			
Tan	-0,114	0,194	-0,018	-0,224	-0,018	1,000		
LnAsset	0,238	0,005	0,107	0,217	0,128	0,124	1,000	
MR	-0,088	-0,301	0,158	0,009	-0,075	-0,279	-0,217	1,000

Notes: This table presents the correlation of each variable. *IR* denotes initial return, *FI* denotes the lag day of the fear index before listing in the secondary market, *LnPoff* presents the natural logarithm of IPO prices offered by firms, *Unrep* presents dummy for underwriter reputation. We used 1 for the underwriters listed among the best 20 underwriters for Indonesia Equity & Rights Offering FY 2019 by Bloomberg and 0 otherwise. *LnAsset* denotes the natural logarithm value of a firm's assets, *ROA* represents return on assets, *TAN* represents tangible assets, and *MR* denotes the lag day of market return before listing in the secondary market.

Correlation

Table 3 presents the correlation matrix of the variables used to detect the multicollinearity problems among independent variables. The results show no multicollinearity problems; thus, this research can proceed to run the regression model.

Fear of COVID-19 and Initial Returns on IPOs

The main results of this study are presented in Table 4. The fear related to COVID-19 negatively influenced the initial returns, suggesting that the lower the fear index, the higher the initial returns. Our results were significant in that if the fear index increased by 1%, the initial returns decreased by 0.504%.

Table 4.
Initial Returns And Fear Of Covid-19.

Variable	IR	Prob t-stats
Constanta	0,775***	0,000
FI	-0,504***	0,000
UnRep	0,068*	0,046
LnPoff	-0,091***	0,000
ROA	0,307**	0,008
Tan	-0,105	0,079
LnAsset	0,025*	0,012
MR	-3,697***	0,001
Number of observations	51	
Adjusted R-squared	0,691	
Prob (F-statistic)	0,000	
Mean VIF	1,16	

Notes: This table presents the main results of the regression. The dependent variable is *IR*, which denote: initial returns, *FI* denotes the lag day of the fear index before listing in the secondary market, *LnPoff* denote: the natural logarithm of IPO prices offered by firms, *Unrep* presents dummy for underwriter reputation. We used 1 for the underwriters listed among the best 20 underwriters for Indonesia Equity & Rights Offering FY 2019 by Bloomberg and 0 otherwise. *LnAsset* denotes the natural logarithm value of a firm's assets, *ROA* represents return on assets, *TAN* represents tangible assets, and *MR* denotes the lag day of market return before listing in the secondary market. * p<0.05; ** p<0.01; *** p<0.001.

This may have been due to investors' reactions to the caused by COVID-19. Investors' optimism or pessimism about stock prices can change (Naseem et al., 2021). The anxiety caused by COVID-19 arguably changed investors' decisions over investments in IPO firms. As the fear of COVID-19 increased, investors tended to bargain at lower levels. Furthermore, as the fear increased, uncertainty rose. Investors were unsure as to whether they should spend their money, since they were increasingly concerned about their livelihoods (Naseem et al., 2021).

On the other hand, while the fear decreased, investor optimism regarding the future of the market rose. In line with the study by Mazumder and Saha (2021), this research found that the fear of the COVID-19 pandemic was negatively and significantly associated with the initial returns of IPO firms. As in the US, the fear of the COVID-19 pandemic also negatively affected the IPO process in Indonesia.

For issue-specific characteristics, the underwriter's reputation positively and significantly affected the initial returns, suggesting that reputable underwriters are among the considerations of investors investing in IPO firms. In contrast with our expectations, highly reputable underwriters affected the investors' perception of firms' quality. The offer price also significantly influenced the initial returns; the higher the IPO price offered, the lower the initial returns.

With regard to firm-specific characteristics, ROA and firms' assets affected the initial returns significantly, while tangible assets did not. While the return on assets is essential for the investors, tangible assets are not. The reason for this may be that a firm's ability to manage its assets, as reflected by the ROA, affects investors' perceptions of the firm. On the other hand, the COVID-19 pandemic changed business behavior, such as through working from home. In line with this development, tangible assets are no longer considered as frequently by investors due to the rise of digital working practices and assets.

The relationship between market-specific characteristics and market returns has a negative effect on initial returns, strongly suggesting that when there is a high market return, investors deal in IPO stocks in the secondary market at a low level. Overall, this model fits 69,1% of R-squared and has a mean variance inflation factor (VIF) of 1.16.

Robustness Test

This study include an additional test, which involved transforming *FI* with dummy *Covid*. *Covid* is the dummy of the COVID-19 condition: we used 1 for the companies listed after March 2nd, 2020 and 0 otherwise. The results are presented in Table 5.

Table 5.
Additional test (dummy of COVID and IR)

Variable	IR
Constanta	0,692***
Covid	-0,315***
UnRep	0,079*
LnPoff	-0,067**
ROA	0,298*
Tan	-0,059
LnAsset	0,020
MRd-1	-1,789
Number of observations	51
Adjusted R-squared	0,654
Prob (F-statistic)	0,000

Notes: This table presents the additional test. The dependent variable is *IR*, which denotes initial returns, *Covid* denotes dummy for COVID condition. We used 1 for the companies listed after March 2nd 2020 and 0 otherwise. *LnPoff* denotes the natural logarithm of the IPO prices offered by firms, *Unrep* denotes dummy for underwriter reputation. We used 1 for the underwriters listed among the best 20 underwriters for Indonesia Equity & Rights Offering FY 2019 by Bloomberg and 0 otherwise. *LnAsset* denotes the natural logarithm value of firm's asset, *ROA* represents return on assets, *TAN* represents tangible assets, and *MR* denotes the lag day of market return before listing in the secondary market. * p<0.05; ** p<0.01; *** p<0.001.

Conclusion

The COVID-19 pandemic created a general sense of fear, beginning when the first cases were announced. Subsequently, the announcement of the first death from COVID-19 created the highest value on the fear index. While the reported cases and

The table shows that the fear of COVID-19 has a significant negative impact on initial returns, suggesting that the COVID-19-condition dummy increase from zero to one was associated with 31.5% of the decrease in initial returns. COVID-19 therefore affected the IPO market significantly.

Furthermore, the other variables, namely the underwriter's reputation, offer price, and return on assets, had a significant impact. However, by contrast, the others had no impact on the initial returns.

reported deaths rose, the value of the fear index reduced after the peak and stabilized at around 0.53 until the end of year. The pandemic also shocked the economy, including the stock market. This study found that the fear of the COVID-19 pandemic negatively affected the initial returns on IPOs. This finding was supported by the additional test.

The findings prove that the fear of COVID-19 affected the IPO market. In this way, this study offers insights to issuers, investors, policymakers, and other researchers. For issuers, this study offers insights into when to launch IPOs during the start of a crisis. For investors, insights are offered into how the beginning of the crisis impacted the initial returns on IPO stocks. Policymakers are expected to formulate appropriate policies, especially those designed to reduce the virus's spread. This is because the fear of COVID-19 affects not only on the health, but also the economy, including the stock market.

Since the COVID-19 pandemic is ongoing, this paper's limitation is that it only involved data from the year in which COVID-19 was first announced, 2020. However, the findings of this study extend the study by Kuswanto (2021) about the initial returns on IPOs in Indonesia. Future research could include the performances of IPOs in the short term and across countries.

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