

# Initial Public Offerings and the Power of Media in Times of Uncertainty: Evidence from the COVID-19 Pandemic

Ra-Pee Pattanapanyasat\*  
Aim-orn Jaikengkit\*\*

## Abstract

The present study investigates whether the Coronavirus disease 2019 (COVID-19) pandemic has influenced the degree of online media coverage on initial public offering (IPO) firms in Thailand and moderates the relation between media coverage and IPO outcomes. Empirical evidence indicates that media coverage affects the initial returns of firms going public in the pre-pandemic period. The COVID-19 pandemic has heightened the level of global uncertainty, and it is expected to alter the role of online media outlets in stimulating equity offering activities. Using regression analysis, this study demonstrates an increase in the coverage on IPO firms by Facebook, Twitter, and news websites during the pandemic. Greater online media coverage leads to higher first-day initial returns, which is evidence of boosting investors' attention. However, the pandemic has had no significant impact on the relation between media coverage and IPO outcomes. These results provide insight into how the uncertainty from the pandemic induces changes to media coverage and how online media channels can be utilized to raise the visibility of IPO firms in emerging economies, with the study potentially having timely implications for academics, regulators, and practitioners.

**Keywords:** COVID-19; Media Coverage; Social Media; Initial Public Offering; Uncertainty

**Received:** February 14, 2022 | **Revised:** April 5, 2022 | **Accepted:** April 20, 2022

---

\* Lecturer, Department of Accountancy, Chulalongkorn Business School, Chulalongkorn University, Phayathai Road, Pathumwan, Bangkok, Thailand, 10330. Email: ra-pee@cbs.chula.ac.th; Corresponding author.

\*\* Assistant Professor, Department of Accountancy, Chulalongkorn Business School, Chulalongkorn University, Phayathai Road, Pathumwan, Bangkok, Thailand. Email: aim-orn@cbs.chula.ac.th

**Acknowledgements:** We appreciate the helpful comments from Associate Professor Supol Durongwatana (Editor-in-Chief), anonymous reviewers, and Professor Uthai Tanlamai. This research was funded by Grants for Special Task Force for Activating Research (STAR) Ratchadaphiseksomphot Endowment Fund, Chulalongkorn University.

## Introduction

When firms offer equity to the public for the first time, the information environment of initial public offering (IPO) firms is less developed than that of listed firms. Media coverage facilitates firms in going public by enhancing the level of information among investors (Chen et al., 2020; Pollock & Rindova, 2003) or directing investors' attention to the firms (Bushee et al., 2020; Cook et al., 2006). Previous literature has focused on media coverage of IPOs and its effect on their outcomes before the COVID-19 pandemic. While the world has faced great uncertainty due to the pandemic, evidence is lacking on the role that media coverage could play in addressing this uncertainty.<sup>1</sup> Utilizing the exogenous shock of the COVID-19 pandemic in Thailand, this study examines whether greater uncertainty alters the degree of coverage throughout the social media landscape and moderates the relation between online media coverage and IPO outcomes.

Being averse to uncertainty, investors tend to demand more information when uncertainty increases (Bonsall et al., 2020), and online media coverage has the potential to enhance the dissemination of information and visibility of IPO firms. Unlike digital presence, media coverage is external to firms and reflects the information provided by outsiders. While the effect of media coverage is unclear, it is important to gain further insights into whether the supply of information from the media follows the anticipated demand for an IPO and to what extent media coverage influences investor decisions amid the pandemic.

In examining our research questions, we focus on the official Facebook page of the Stock Exchange of Thailand (SET), Twitter, and news websites because these channels are immensely popular in Thailand and could improve the flow of information at lower marginal costs.<sup>2</sup> The sample firms are IPOs spanning the period 2015 to 2020, in which a new normal period starts on 22 March 2020 when the first COVID-19 lockdown was imposed in Thailand.<sup>3</sup>

We first investigate whether the pandemic leads to increased media coverage. Prior studies on media coverage and IPOs typically explore conventional media by using news articles in newspapers and their effect on IPO returns (Bushee et al., 2020; Chen et al., 2020; Cook et al., 2006; Liu et al., 2014; Pollock & Rindova, 2003). However, the pandemic is rewriting the way investors demand information about firms, and online social media has become a dominant mode of information dissemination. Since greater market uncertainty leads to an expanded role of media coverage (Bonsall et al., 2020), we expect increased online media coverage of IPO firms in response to the pandemic.

Our empirical results show that compared to the group of IPO firms before the lockdown started, the group of firms having their IPOs during the new normal period received

---

<sup>1</sup> According to Knight (1921), uncertainty is distinct from risk. Risk is a situation in which future outcomes are unknown, but the probability distribution of outcomes is known. Uncertainty is defined as the situation in which both the probability distribution of outcomes and future outcomes are unknown.

<sup>2</sup> From a population of 69 million in Thailand, there were 50.31 million internet users in 2019, and almost all of them were using Facebook (Statista, 2020a, 2020b). Thailand is ranked tenth in the world based on Twitter users (Statista, 2021).

<sup>3</sup> Triukose et al. (2021) considers 12 January 2020, the date when the first imported case was identified, as the start of the first wave of COVID-19 outbreak in Thailand. In this study, the lockdown imposed in late March 2020 is chosen as the beginning of the new normal era. The lockdown is highly observable and resulted in great uncertainty. Moreover, during the first two months after the first imported case was reported, the number of confirmed cases was low until early March. The lockdown measure caused considerable disruption to the economy and society. Since the lockdown measure was lifted, there has been a shift in the way people live and work, such as remote working and social distancing.

increased media coverage in the form of Facebook posts by regulators, tweets by Twitter users, and stories on news websites. The results support our prediction and are robust when controlling for the financial performance of IPO firms and adjusting for the timing of the media coverage.

We examine whether the pandemic intensified or weakened the effect of media coverage on IPO first-day initial returns. Empirical evidence prior to the pandemic suggests that media coverage on IPO firms has an impact on underpricing, which is a substantial increase in returns on the first trading day. Under an information effect explanation, media coverage mitigates information asymmetry among investors, resulting in less underpricing (Chen et al., 2020; Pollock & Rindova, 2003). Conversely, the attention role of media coverage aggravates information frictions in the market by boosting investors' attention on the firms and leading to greater underpricing (Bushee et al., 2020; Cook et al., 2006). Media coverage generates attention instead of providing additional information because it contains less precise and comprehensive information than a firm's IPO prospectus (Bushee et al., 2020). The attention effect is predicted to dominate, and the relation between media coverage and IPO underpricing is expected to be more pronounced during the pandemic because of increased uncertainty.

Our results indicate that IPOs from 2015 to 2020 are underpriced, and that increasing media coverage is associated with greater underpricing. The relation between media coverage and IPO underpricing is unchanged when we account for firms' financial performance. Additional analyses reveal that a primary effect is the channel by which media coverage affects underpricing: greater media coverage appears to boost the first-day open price. Although our results provide support for the attention effect, the role of media coverage on underpricing is not different when comparing the pre-pandemic and new normal periods.

This study contributes to the research on Thai IPOs. Several studies have investigated factors affecting IPO outcomes such as regulatory policies including corporate governance reform (Ekkayokkaya & Pengniti, 2012) and capital control (Komenkul & Siriwattanukul, 2016), IPO allocation (Boonchuaymetta & Chuanrommanee, 2013), prospectus disclosure (Kim et al., 2004; Lonkani & Firth, 2005; Sherif et al., 2016), and the behavior of lead underwriters (Saengchote & Sthienchoak, 2020). A variety of determinants have been identified in prior research, but the influence of media has not been investigated. Our study provides insights into how novel forms of media can be utilized to raise investors' attention of IPO firms in this capital market.

We extend the literature on the impact of media on capital markets, particularly in times of uncertainty. Although our study is related to Chen et al. (2020), which investigates the relation between media coverage and IPOs across 39 countries, including Thailand, the sample period in Chen et al. (2020) is 2000 to 2014. The existing studies mostly concentrate on the United States and were carried out before the onset of the pandemic. To the best of our knowledge, this study is the first to shed some light on the expanded role of the media during the pandemic and its resulting impact on firms going public.

The results of this study can help inform regulators and practitioners. In the digital age and times of uncertainty, social media is considered a convenient channel for regulators and firms to reach a wider audience at low marginal costs. We present initial evidence suggesting a surge in coverage on IPO firms on social media and news websites during the pandemic. Greater media coverage appears to be beneficial to enhancing investors' awareness of IPO firms. This study is particularly timely considering the effect of the pandemic on equity offering activities, adding to the prior studies and serving as a starting point for future research.

The remainder of the paper proceeds as follows. The next section summarizes the COVID-19 pandemic in Thailand. Section 3 summarizes the related literature and proposes the hypotheses. Section 4 describes the research methodology and the sample selection. Section 5 reports on the empirical results and provides robustness tests. Section 6 provides discussion, and Section 7 concludes the study.

### **The COVID-19 Pandemic in Thailand**

In this section, we summarize the COVID-19 pandemic in Thailand in 2020 since the period of this study is from 2015 to 2020. A novel infectious respiratory disease was identified in Wuhan, China, in December 2019. Since then, the disease has spread rapidly throughout the world. The World Health Organization declared the novel coronavirus outbreak a Public Health Emergency of International Concern on 30 January 2020, and a pandemic on 11 March 2020.<sup>4</sup> Thailand was one of the countries earliest affected by the pandemic. An imported case of coronavirus from Wuhan was identified in Thailand on 12 January 2020 and was officially announced on the next day, being the first recorded case outside of China.<sup>5</sup>

Throughout January and February 2020, the number of confirmed cases in Thailand was low, but the situation changed in early March when there were several transmission clusters, resulting in an increased number of confirmed cases from local transmission. The government responded by implementing public health restrictions and interventions (Triukose et al., 2021). One of them was a lockdown measure imposed on 22 March 2020 that started in Bangkok, Thailand's capital city and financial center. In addition, working from home was encouraged. These measures limited economic and social activities (Wancharoen & Wipatayotin, 2020). Although the government kept extending the lockdown, it was over on 3 May 2020. Restrictions and interventions were relaxed during the easing period, and Thailand exited the first wave on 31 July 2020 (Triukose et al., 2021).

To achieve the zero-infection goal, the government's restrictions and interventions generated concern regarding an economic slowdown. Uncertainty increased, which adversely affected the stock market. On 23 March 2020, one day after the lockdown was imposed, the SET index closed at 1,024.46, which was the lowest point in 2020 and a fall of 35.77% from the start of 2020. In the easing period, economic activities resumed, and the stock market rebounded even though it fluctuated throughout 2020 over concern about a resurgence in COVID-19 infection cases.<sup>6</sup> Unexpectedly, Thailand entered the second wave of the pandemic in December 2020, which sparked a new round of concerns about health, society, and the economy.<sup>7</sup>

The government's restrictions and interventions in the first wave inevitably affected IPO activities. During the lockdown, on-site IPO roadshows could not be carried out, and when they resumed, a social distancing measure restricted the number of participants in the roadshows. Some IPOs were postponed because of the pandemic (Chudasri, 2020). IPO activities were paused from March until July 2020. Such economic disruption harms investors' confidence and gives rise to increasing uncertainty on how investors value the IPOs.

---

<sup>4</sup> [https://www.who.int/director-general/speeches/detail/who-director-general-s-statement-on-ihr-emergency-committee-on-novel-coronavirus-\(2019-ncov\)](https://www.who.int/director-general/speeches/detail/who-director-general-s-statement-on-ihr-emergency-committee-on-novel-coronavirus-(2019-ncov))

<sup>5</sup> See <https://www.who.int/news/item/29-06-2020-covidtimeline>

<sup>6</sup> <https://res.scbsonline.com/ENG/document/databookeng2020>

<sup>7</sup> <https://tdri.or.th/en/2021/04/easing-pandemic-pain-among-the-poor/>

Despite the crisis arising from the pandemic, IPOs resumed and continued to be popular. In 2020, Thailand remained the top Southeast Asian IPO market in terms of market capitalization and funds raised (Deloitte, 2021). The number of IPOs in Thailand was also ranked to be second in Asia, behind only China, and the market capitalization of new IPOs in 2020 was considered to be at an all-time high (Chudasri, 2020).

## Literature Review and Hypothesis Development

### Media Coverage and the Pandemic

The influence that media coverage has on financial markets has been well documented in prior research (Tetlock, 2015).<sup>8</sup> News articles in newspapers about firms going public affect IPO first-day returns (Bushee et al., 2020; Chen et al., 2020; Cook et al., 2006; Liu et al., 2014; Pollock & Rindova, 2003); however, the empirical evidence is based on IPO studies before the onset of the COVID-19 pandemic. The pandemic gives rise to greater uncertainty, potentially making online media coverage a dominant mode of information dissemination.

Prior capital market research that explores the period of uncertainty is relatively limited. Researchers have focused on market uncertainty and adopted the volatility of stock markets as a measure of uncertainty. Kim et al. (2016) and Kitagawa (2021) investigated management earnings forecasts and uncertainty. Bonsall et al. (2020) studied media measured by news stories and showed that during a time of high market uncertainty, there is increasing demand from investors for financial information, leading to greater media coverage of earnings announcements.

Drawing on empirical findings from Bonsall et al. (2020), an expansion in media coverage is anticipated in response to the pandemic. The lockdown, work from home policy, and social distancing practices caused by the pandemic could change how people interact and increase the role of social media and news websites in disseminating information. Utilizing online communication channels for information production and dissemination is less costly and more effective in stimulating demand for IPOs. Thus, we predict an increase in online media coverage on IPO firms during the pandemic. We present a conceptual framework in Figure 1 of the Appendix A and formulate our first hypothesis (H1) as follows:

**Hypothesis 1:** Media coverage is higher during the new normal period than during the pre-pandemic period.

### Media Coverage, the Pandemic, and IPO Initial Returns

There are two competing arguments underlying how media coverage affects IPO underpricing. From an economic perspective, the disseminating role of media mitigates information asymmetry among investors by providing additional information to the markets. The information effect of media coverage enhances informational efficiency of stock prices (Tetlock, 2015). More media coverage measured by total number of news articles in the pre-IPO period is predicted to reduce ex-ante information frictions, leading to less underpricing. Empirical studies in the United States and across several countries find evidence consistent with this prediction (Chen et al., 2020; Pollock & Rindova, 2003).

---

<sup>8</sup> See Tetlock (2015) for a review of literature on the role of media.

From a behavioral standpoint, media coverage brings increased visibility for IPO firms, which is referred to as the attention effect. The media places a firm in the spotlight of the public, which attracts investors' attention (Chen et al., 2020). This attention effect is prominent among retail investors (Cook et al., 2006); having limited attention and resources to process information, retail investors appear to be net-buyers of attention-grabbing stocks (Barber & Odean, 2008). Since higher investor attention may exacerbate investor biases, stock prices deviate from their fundamental values. The attention effect leads to initial increases in prices, followed by subsequent return reversal (Bushee et al., 2020; Tetlock, 2015). Thus, greater IPO underpricing is anticipated (Da et al., 2011).

Media coverage improves the dissemination of information or boosts firms' visibility. We argue that the attention effect could dominate and become increasingly prominent during the pandemic. There are word count limitations to a tweet, a Facebook post, and a news article (Boot et al., 2019). Media coverage provides less precise and comprehensive information than a firm's IPO prospectus; therefore, media coverage generates attention instead of providing additional information, which mitigates information asymmetry (Bushee et al., 2020). Recent evidence demonstrates a surge in retail trading during the pandemic, and attention-driven retail trading is more prevalent among stocks with high media coverage (Ozik et al., 2021). The pandemic induces uncertainty to equity offerings, and IPOs during the pandemic are more underpriced (Baig & Chen, 2021). Following this inference, we expect a positive association between media coverage and IPO underpricing, and this relation would be intensified amid the pandemic. A conceptual framework is shown in Figure 2 of the Appendix A, and the following hypotheses are stated.

**Hypothesis 2a:** *Ceteris paribus*, IPO underpricing is positively associated with media coverage.

**Hypothesis 2b:** The relation between media coverage and IPO underpricing is more pronounced during the COVID-19 pandemic.

## Research Methodology

### Media Coverage and the Pandemic

Equation (1) is specified in order to test H1. Our coefficient of interest is  $\beta_1$  and is expected to be positive. The measure of *NEWNORMAL* is defined as an indicator variable that takes a value of 1 if a firm's IPO is during the new normal period (0 otherwise). The new normal period began on 22 March 2020 when the lockdown measure was imposed because this event has had prominent and lasting impacts on the Thai economy and Thai society.

$$\begin{aligned}
 FB_i, TW_i, PR_i, \text{ or } MEDIA_i &= \beta_0 + \beta_1 NEWNORMAL_i + \beta_2 BIG4_i + \beta_3 SET_i + \beta_4 LNOFFERSIZE_i + \\
 &\quad \beta_5 EQUITYOFFER_i + \beta_6 PREIPO_i + INDUSTRY_i + \varepsilon_i
 \end{aligned}
 \tag{1}$$

Our dependent variables are measured by the total number of posts about an IPO firm on the SET Thailand Facebook page (*FB*), the total number of tweets about an IPO firm on Twitter (*TW*), the total number of news stories about an IPO firm on news websites (*PR*), and an IPO firm's media coverage score (*MEDIA*). The first and second dependent variables are based on coverage by social media platforms. *PR* is defined as the total number of news articles about an IPO firm from all three news websites, consisting of the Bangkok Post (www.bangkokpost.com), Bangkok Business (www.bangkokbiznews.com), and Matichon

(www.matichon.co.th). The Bangkok Post is an English-language daily newspaper, while both Bangkok Business and Matichon are Thai-language newspapers, with Bangkok Business focusing on business news.

We develop an IPO firm's media coverage score (*MEDIA*) by summing the total number of Facebook posts, tweets and news articles on each firm. Within each calendar year, we score IPO firms from high to low in order of their total number of media items. The higher the value of *MEDIA*, the larger the number of media coverage items across all these channels. For example, there are 33 IPOs in 2015. If a firm going public in 2015 has the highest (lowest) number of media items among all IPO firms in 2015, the value of *MEDIA* of this firm would be 33 (1).

The proxy for media coverage, which is typically used in prior research, is the total number of news articles about an IPO firm. Some studies use a 30-day period prior to the IPO date because this short window represents the period in which there is a strong investor interest (Chen et al., 2020; Liu et al., 2014). Nevertheless, previous findings are robust to alternative time windows, such as 60 days. In this study, in addition to online news websites, we expand our investigation into social media and use the 60-day period prior to the IPO date. We select this window in order to cover the relatively long period of IPO preparation in Thailand; the duration from IPO filing date until the first trading date is approximately 205 days. In this regard, we count the total number of Facebook posts, tweets, or news articles about an IPO firm within 60 days before the first trading day until the closing time (5 pm) of the first trading day. In doing so, we fully capture media coverage up until the first trading day and its resulting impact on first-day initial returns.

When *FB* is the dependent variable, we estimate an Ordered Probit model because of the distribution of *FB*, as shown in our research findings section. When the dependent variable is *TW*, *PR*, or *MEDIA*, we estimate a Tobit model.<sup>9</sup> We add variables to control for other likely sources of variation in media coverage. We account for the ex-ante uncertainty of an IPO firm, which is measured by the natural log of offer size (*LNOFFERSIZE*).

We also control for the quality of an IPO firm, which is proxied by *BIG4*, *SET*, and *EQUITYOFFER*. *BIG4* is defined as an indicator variable that takes a value of 1 if a firm's financial statements are audited by the Big 4 auditors (0 otherwise). In Thailand, there are two equity markets: the Stock Exchange of Thailand (SET) and the Market for Alternative Investment (MAI).<sup>10</sup> *SET* is an indicator variable that takes a value of 1 (0) if a firm's IPO is on the SET (MAI). *EQUITYOFFER* is the percentage of equity offered. An IPO firm that has its financial statements audited by one of the Big 4 auditors, lists on the SET, or offers a lower percentage of equity is regarded as having higher quality.<sup>11</sup> In addition, we account for previous IPO activities by using the total number of a firm's IPOs before each firm offers its equity (*PREIPO*). Lower *PREIPO* means there are few IPOs prior to the firm issuing its equity, so media coverage could be needed to promote the firm. We include industry (*INDUSTRY*)

---

<sup>9</sup> In untabulated results, we conduct a skewness and kurtosis normality test and a Shapiro-Wilk normality test for *FB*, *TW*, *PR*, and *MEDIA*. We find that the *p*-value of each variable is less than 0.01. Thus, we reject the null hypothesis of having a normal distribution and conclude that the normality assumption for *FB*, *TW*, *PR* and *MEDIA* is unlikely to be satisfied.

<sup>10</sup> Compared to listing on the MAI, listing on the SET is subject to a higher threshold level. More than 30 (10) million baht in net income for the latest financial year is required for a company to be eligible to list on the SET (MAI). A market value of more than 7,500 (1,000) million baht is required for listing on the SET (MAI).

<sup>11</sup> Levels of equity offering reflect a signal for adverse selection. The higher the equity offered, the more severe the adverse selection (Leland & Pyle, 1977).

indicator variables, but year indicator variables are excluded because of collinearity with *NEWNORMAL*.

### Media Coverage, the Pandemic, and IPO Initial Returns

To test H2a and H2b, following Chen et al. (2020), we estimate a cross-sectional ordinary least squares (OLS) regression in Equation (2), where an initial return (*RETURN*) is calculated as the first-day close price of an IPO minus its final offer price scaled by the final offer price.

$$\begin{aligned} RETURN_i = & \beta_0 + \beta_1 MEDIA_i + \beta_2 NEWNORMAL_i + \beta_3 MEDIA_i * NEWNORMAL_i + \\ & \beta_4 BIG4_i + \beta_5 SET_i + \beta_6 LNOFFERSIZE_i + \beta_7 EQUITYOFFER_i + \\ & \beta_8 PREIPO_i + \varepsilon_i \end{aligned} \quad (2)$$

Following earlier empirical studies, we control for ex-ante uncertainty and the quality of an IPO firm. The proxy for ex-ante uncertainty is *LNOFFERSIZE*. Higher offer size is negatively associated with ex-ante uncertainty and underpricing (Ekkayokkaya & Pengniti, 2012; Saengchote & Sthienchoak, 2020; Sherif et al., 2016). The quality of an IPO firm is measured by *BIG4*, *SET*, and *EQUITYOFFER*. High quality IPO firms are those that have financial statements audited by one of the Big 4 auditors, list on the SET, or offer a relatively lower percentage of equity. High quality implies lower risk and relates to greater underpricing. Like Equation (1), we add *PREIPO* and control for the effect of industry.

### Data and Sample Construction

The sample of this study includes IPOs of stocks on the SET and MAI. We gather the IPOs from the Refinitiv SDC Platinum Global New Issues database (SDC), excluding all unit offerings and real estate investment trusts. We manually cross-check the SDC data with IPO filings which appear on the website of the Securities and Exchange Commission (SEC) and the IPO data provided on the website of the SET. The sample period covers the years 2015 to 2020, resulting in 166 IPO firms.

The measures of media coverage including *FB*, *TW*, and *PR* are retrieved through a web scraping process. We scrape posts on the SET Thailand Facebook page, tweets about the sample firms from Twitter, and news articles about the firms from the online news websites of the Bangkok Post, Bangkok Business, and Matichon. To calculate the IPO initial returns (*RETURN*), we collect daily share prices from SETSMART, an internet-based service provided by the SET. Other variables are retrieved from the SDC and the SEC website.

## Research Findings

### IPO Activities

The distribution of IPOs and their total offer size in Thailand from 2015 to 2020 is shown in Panel A of Table 1. During the sample period, the number of IPOs and their total offer size fluctuated and reached a peak in 2020 despite the pandemic. The total number of IPOs is split evenly between the SET and MAI. The offer size on the SET is generally greater than that on the MAI because larger firms tend to offer their equity on the SET.

Panel B of Table 1 presents the distribution of IPOs by month. The fourth quarter of each calendar year is usually the most popular time for IPOs, whereas there were some months when no IPOs occurred. From March 2020, there were no new IPOs for four consecutive



months. This could have resulted from the uncertainty arising from the pandemic and the lockdown imposed in March. In the second half of 2020, IPO activities resumed and closed at a record high.

### Summary Statistics

In Table 2, the descriptive statistics of our sample firms are reported in Panel A, while tests for differences in the mean values of IPO firms between the pre-pandemic and new normal periods are presented in Panel B. The average number of posts per IPO on the SET Thailand Facebook page, tweets from Twitter, and news articles from news websites is 0.87, 2.55, and 4.52, respectively. Some sample firms received zero coverage on social media platforms or news websites. However, the univariate results in Panel B show that during the new normal period, there was a significant increase in media coverage through all channels. The sample firms have at least one post on the Facebook page of the SET or one article on a news website. On average, the social media coverage on our sample firms increased by approximately 300% after the lockdown started. The differences in *FB*, *TW*, and *PR* between the group of IPO firms before the pandemic and the other group in the new normal period are statistically significant.

The range of initial returns is from -30.07% to 200% with an average initial return of 33.84%. The positive initial returns suggest that IPOs in Thailand are, on average, underpriced, which is consistent with prior studies. Among our sample firms, 62.65% of the financial statements are audited by Big 4 auditors, and half of the sample firms are listed on the SET. When raising capital, the average offer size is 2,929.24 million baht, and the firms offer approximately 26.74% of their equity. There are around 14 listed IPOs before each firm issues its equity offering. Unlike media coverage, the IPO initial return and other control variables are not statistically different between the pre-pandemic and new normal periods. The characteristics of our sample firms seem to be unchanged over these periods.

The Pearson correlations between the regression variables are included in Table 3. *RETURN*, *FB*, *TW*, and *PR* are positively correlated with *NEWNORMAL* and statistically significant. The correlation between *FB* and *NEWNORMAL* is particularly strong. Since there were no new IPOs for several months in 2020, the regulator had greater incentive to stimulate capital raising activities and promote IPOs through its Facebook page during the pandemic. *LNOFFERSIZE* is positively correlated with *TW*, *PR*, *MEDIA*, *BIG4*, and *SET*. Compared to the MAI, the SET is typically a market for larger equity offerings. There is a strong correlation between *SET* and *LNOFFERSIZE*, but the Variance Inflation Factors (VIFs) values in our subsequent analyses do not indicate a multicollinearity problem. Moreover, the correlations presented in Table 3 are below 0.8, which suggests that an issue of multicollinearity is unlikely (Midi et al., 2010).

### Media Coverage and the Pandemic

Table 4 reports the results of Equation (1), which examines media coverage during the pandemic, while controlling for other correlated variables. An Ordered Probit model is specified in model (1) where *FB* is the dependent variable, and a Tobit model is estimated in models (2)–(4) where *TW*, *PR*, and *MEDIA* are the dependent variables, respectively. The coefficients of *NEWNORMAL* are statistically significant at the 1% level of significance and positive across models (1)–(3). Compared to the group of IPO firms before the pandemic, the group of IPO firms in the new normal period received higher media coverage through Facebook posts, Twitter, and news websites. Our findings provide support for H1.

The relations between other variables and media coverage differ across media channels. The SET has an incentive to promote capital market activities, and the sequence of IPO listing seems to matter. When there are few IPOs before a firm offers its equity, it tends to receive more posts on the SET Thailand Facebook page. However, IPO firms are similarly featured on the regulator's Facebook page regardless of listing markets or offer size. Lastly, Twitter and news websites pay more attention to MAI firms and firms with larger offer size.

### Media Coverage, the Pandemic, and IPO Initial Returns

We investigate the implications of media coverage on initial return and the moderating role of the pandemic by estimating an OLS regression in Equation (2). Because of collinearity between *NEWNORMAL* and the measures of media coverage, including *FB*, *TW*, and *PR*, it is important that we use the IPO firm's media coverage score (*MEDIA*). Table 5 reports the OLS regression results. In model (1), the coefficient of *MEDIA* is statistically significant and positive. An increase in media coverage is associated with higher return on the first trading day (*RETURN*) and appears to support the attention effect, in which media coverage increases underpricing (H2a). When we add an interaction term of *MEDIA\*NEWNORMAL*, the coefficient of *MEDIA* remains statistically significant and positive in model (2). However, the coefficients of *NEWNORMAL* in models (1) and (2) and the coefficients of *MEDIA\*NEWNORMAL* in model (2) are insignificant. The effect of media coverage on underpricing is not different between the pre-pandemic and the new normal periods.

The direction of other significant control variables is as expected. We find negative associations between offer size (*LNOFFERSIZE*) and IPO initial return (*RETURN*), and the relations are significant for models (1) and (2). Consistent with prior studies (Saengchote & Sthienchoak, 2020; Sherif et al., 2016), offer size is a proxy for ex-ante uncertainty and is negatively associated with underpricing. The quality of IPO firms is predicted to affect underpricing. Increasing the level of equity offered (*EQUITYOFFER*) is considered a signal of a poor-quality firm, reducing underpricing. In both models of Table 5, there are negative and significant relations between *EQUITYOFFER* and underpricing. For other variables including *BIG4* and *SET*, they are the measures of quality of IPO firms, but are statistically insignificant. As for the sequence of IPO listing (*PREIPO*), firms that issue their equity when there are many offerings before them are associated with less underpricing.

### Additional Analysis and Robustness Tests

We decompose an IPO initial return into a primary return and a secondary return in order to investigate how media coverage influences underpricing. The primary return (*RETURN\_PRIM*) is calculated as the offer-to-open change in price on the first trading day, and the secondary return (*RETURN\_SEC*) is computed as the open-to-close change in price on the first trading day. Since the primary return and secondary return are calculated from the open price, we adjust *MEDIA* by shortening the timing of media coverage to within 60 days before the first trading day.

In untabulated results, the mean of *RETURN\_PRIM* is positive and the average *RETURN\_SEC* is negative. The open price appears to be higher than the offer price. The stock prices then close at a price lower than the open price, but the price is still above the offer price. In models (1)–(4) of Table 6, we find the effect of media coverage on primary returns, but there is no significant effect of media coverage on secondary returns. Increasing media coverage is significantly related to a higher open price. In addition, we define *RETURN\_HIGH* as the

difference between the highest price on the first trading day and the offer price. In models (5) and (6), the coefficients of *MEDIA* are significantly positive. Taken together, media coverage prior to the IPOs affects underpricing through boosting the open price and the maximum price on the first trading day.

Our earlier findings identify the pandemic time (*NEWNORMAL*) as one of the determinants of media coverage and demonstrate the implications of media coverage on underpricing. We further conduct several robustness tests by using alternative timing of media coverage. In untabulated results, the effect of *NEWNORMAL* stays robust when we vary the timing of media coverage across all three online channels from 60 days before the first trading day to 30, 28, 14, and 7 days before.

In addition, we re-estimate Equations (1) and (2) and account for other correlated variables including profitability, growth, and leverage before a firm offers its IPO. Profitability is defined as net income after tax (*NETINCOME*). Growth is measured by earnings before interest and tax (EBIT) minus its EBIT 12 months before the IPO divided by EBIT 12 months before the IPO (*GROWTH*). Debt to equity ratio (*DE*) is a measure of leverage. Our sample size is reduced to 128 firms due to missing data.

Panel A of Table 7 reports the results of Equation (1) and shows consistent findings with Table 4. When considering these financial performance measures of the IPO firms, the coefficients of *NEWNORMAL* remain statistically significant and positive in all models. The group of firms that issue their IPOs during the new normal period is associated with higher coverage on the Facebook page of the regulator, Twitter, and news websites than the other group during the pre-pandemic period. There are some significant relations between *NETINCOME* and media coverage. In untabulated results, the effect of *NEWNORMAL* stays robust when we measure profitability by total revenue prior to the IPO.

Panel B of Table 7 presents the robustness checks for the relations between media coverage and IPO initial return. When we re-estimate Equation (2) by including the profitability, leverage, and growth of the IPO firms, the significance and direction of the IPO firm's media coverage score (*MEDIA*) on underpricing are unchanged. We do not find that the pandemic moderates the relation between media coverage and IPO underpricing. None of the robustness check results affect our conclusions in a material way.

## Discussions

Our univariate results indicate an increase in online media coverage during the pandemic. When controlling for other correlated variables, our regression analyses show consistent results. The group of firms going public in times of uncertainty is associated with higher media coverage through social media and news websites. The consequence of media coverage seems to follow the attention argument. Increasing media coverage is found to be associated with greater underpricing regardless of listing year. Despite increased reliance on media during the pandemic, the period of intensified uncertainty does not seem to have altered the influence of media on IPO initial returns.

## Theoretical Contributions

The present study offers important contributions to capital market research. We extend the empirical studies on Thai IPOs by revealing further insights into how the social media

landscape can be utilized to enhance investors' awareness of firms going public in emerging economies. In addition, our evidence contributes to the literature on the role of media in financial markets. Prior studies indicate that coverage by traditional media influences IPO underpricing during the pre-pandemic period. However, this study focuses on novel forms of media and demonstrates the increased coverage by social media and news websites in addressing uncertainty arising from the pandemic.

### **Managerial Implications**

We provide empirical evidence that should be of interest to regulators and practitioners. Thailand was among the earliest affected countries by the outbreak and is a leading country in terms of social media users. In the digital age, online communication channels facilitate the flow of information to a wide range of audiences at low marginal costs. Utilizing the pandemic, this study demonstrates the increasing reliance on social media and news websites in response to heightened uncertainty. When uncertainty was building in Thailand, there were no new IPOs for a significant period. Regulators play an important role in stimulating capital market activities, and in doing so, social media becomes a dominant and convenient means for regulators to address market uncertainty. Furthermore, there was an increasing public interest in IPO firms via the social media platform of Twitter, and there were more articles about IPO firms on news websites during the pandemic. The resulting effect of higher media coverage is more underpricing, thus boosting firms' visibility appears to be the channel by which media coverage influences IPO outcomes.

## **Conclusion**

### **Brief Summary**

This study examines whether the pandemic has affected the degree of coverage by social media and news websites on firms going public, and whether it moderates the relation between media coverage and IPO first-day initial returns. During the new normal period, there is an expansion of coverage on IPO firms via online communications channels. Media coverage could affect IPO initial returns through the information effect or the attention effect. This study provides support for the attention effect. More online media coverage is associated with greater underpricing and a higher first-day open price. However, we do not find the moderating role of the pandemic on the relation between media coverage and underpricing.

### **Limitations and Directions of Future Research**

This study is subject to some limitations. Due to data limitation, the new normal time period in our study covers a period of less than one year, resulting in small sample sizes. The sample sizes may have low power and limits the extent to which we can include control variables and perform a subsample analysis, such as the implications of media coverage on IPO firms on the SET and MAI. While we observed a change in the degree of media coverage in coping with the uncertainty, the impacts of the pandemic on the association between media coverage and IPO outcomes remain unchanged. Future research can consider expanding the sample size by including more years of the new normal time period as data becomes available and by investigating the longer-term consequences of the ongoing pandemic.

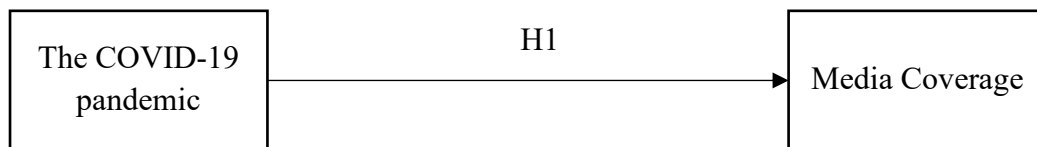
## References

- Baig, A. S., & Chen, M. (2021). Did the COVID-19 pandemic (really) positively impact the IPO Market? An analysis of information uncertainty. *Finance Research Letters*, 102372.
- Barber, B. M., & Odean, T. (2008). All that glitters: The effect of attention and news on the buying behavior of individual and institutional investors. *The Review of Financial Studies*, 21(2), 785-818.
- Bonsall, S. B., Green, J., & Muller, K. A. (2020). Market uncertainty and the importance of media coverage at earnings announcements. *Journal of Accounting and Economics*, 69(1), 101264.
- Boot, A. B., Tjong Kim Sang, E., Dijkstra, K., & Zwaan, R. (2019). How character limit affects language usage in tweets. *Palgrave Communications*, 5(1), 1-13.
- Boonchuaymetta, E., & Chuanrommanee, W. (2013). Management of the IPO performance in Thailand. *Journal of Multinational Financial Management*, 23(4), 272-284.
- Bushee, B., Cedergrén, M., & Michels, J. (2020). Does the media help or hurt retail investors during the IPO quiet period?. *Journal of Accounting Economics*, 69(1), 101261.
- Chen, Y., Goyal, A., Veeraraghavan, M., & Zolotoy, L. (2020). Media coverage and IPO pricing around the world. *Journal of Financial Quantitative Analysis*, 55(5), 1515-1553.
- Chudasri, D. (2020, December 29). Thailand ranks No.2 among Asian IPOs. *Bangkok Post*. <https://www.bangkokpost.com/business/2042527/thailand-ranks-no-2-among-asi-an-ipos>
- Cook, D. O., Kieschnick, R., & Van Ness, R. A. (2006). On the marketing of IPOs. *Journal of Financial Economics*, 82(1), 35-61.
- Da, Z., Engelberg, J., & Gao, P. (2011). In search of attention. *The Journal of Finance*, 66(5), 1461-1499.
- Deloitte. (2021). *Southeast Asia IPO capital market 2020 Full Year Report*. <https://www2.deloitte.com/content/dam/Deloitte/sg/Documents/audit/sea-aud-ipo-market-report-2020.pdf>
- Ekkayokkaya, M., & Pengniti, T. (2012). Governance reform and IPO underpricing. *Journal of Corporate Finance*, 18(2), 238-253.
- Kim, K., Pandit, S., & Wasley, C. E. (2016). Macroeconomic uncertainty and management earnings forecasts. *Accounting Horizons*, 30(1), 157-172.
- Kim, K. A., Kitsabunnarat, P., & Nofsinger, J. R. (2004). Ownership and operating performance in an emerging market: Evidence from Thai IPO firms. *Journal of Corporate Finance*, 10(3), 355-381.
- Kitagawa, N. (2021). Macroeconomic uncertainty and management forecast accuracy. *Journal of Contemporary Accounting & Economics*, 17(3), 100281.
- Knight, F. H. (1921). *Risk, uncertainty and profit* (Vol. 31). Houghton Mifflin.
- Komenkul, K., & Siriwattanakul, D. (2016). How the unremunerated reserve requirement by the Bank of Thailand affects IPO underpricing and the long-run performance of IPOs. *Journal of Financial Regulation and Compliance*, 24(3), 317-342. <https://doi.org/10.1108/JFRC-09-2015-0052>
- Leland, H. E., & Pyle, D. H. (1977). Informational Asymmetries, Financial Structure, and Financial Intermediation. *The Journal of Finance*, 32(2), 371-387. <https://doi.org/10.2307/2326770>
- Liu, L. X., Sherman, A. E., & Zhang, Y. (2014). The long-run role of the media: Evidence from initial public offerings. *Management Science*, 60(8), 1945-1964.

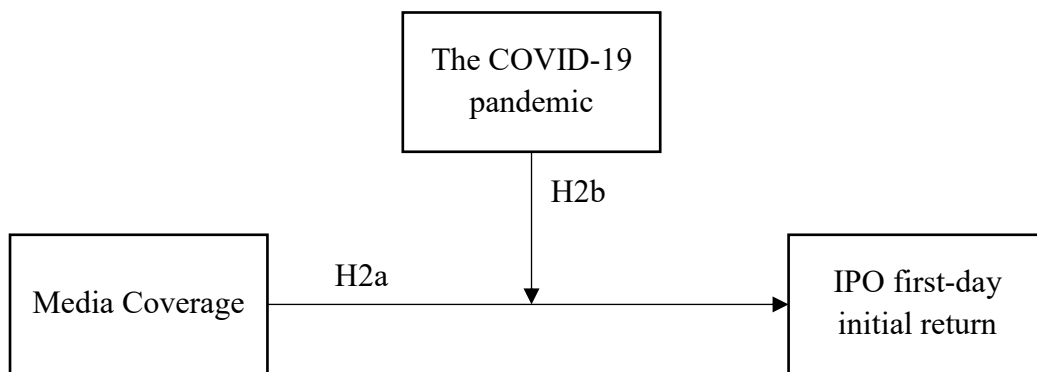
- Lonkani, R., & Firth, M. (2005). The accuracy of IPO earnings forecasts in Thailand and their relationships with stock market valuation. *Accounting Business Research*, 35(3), 269-286.
- Midi, H., Sarkar, S. K., & Rana, S. (2010). Collinearity diagnostics of binary logistic regression model. *Journal of Interdisciplinary Mathematics*, 13(3), 253-267.
- Ozik, G., Sadka, R., & Shen, S. (2021). Flattening the illiquidity curve: Retail trading during the COVID-19 lockdown. *Journal of Financial and Quantitative Analysis*, 56(7), 2356-2388. <https://doi.org/10.1017/S0022109021000387>
- Pollock, T. G., & Rindova, V. P. (2003). Media legitimation effects in the market for initial public offerings. *Academy of Management Journal*, 46(5), 631-642.
- Saengchote, K., & Sthienchoak, J. (2020). Strategic participation in IPOs by affiliated mutual funds: Thai evidence. *Pacific-Basin Finance Journal*, 101427.
- Sherif, M., Komenkul, K., & Xu, B. (2016). Prospectus disclosure and the stock market performance of initial public offerings (IPOs): The case of Thailand. *Investment Management Financial Innovations*, 13(4), 146-159.
- Statista. (2020a). *Number of Facebook users in Thailand from 2017 to 2025 (in millions)*. <https://www.statista.com/statistics/490467/number-of-thailand-facebook-users>
- Statista. (2020b). *Statista dossier about Thailand*. <https://www.statista.com/study/25675/thailand-and-statista-dossier/>
- Statista. (2021). *Leading countries based on number of Twitter users as of October 2021 (in millions)*. <https://www.statista.com/statistics/242606/number-of-active-twitter-users-in-selected-countries/>
- Tetlock, P. C. (2015). The role of media in finance. In *Handbook of Media Economics* (Vol. 1, pp. 701-721). Elsevier.
- Triukose, S., Nitinawarat, S., Satian, P., Somboonsavatdee, A., Chotikarn, P., Thammasanya, T., Kakhong, B. (2021). Effects of public health interventions on the epidemiological spread during the first wave of the COVID-19 outbreak in Thailand. *Plos One*, 16(2), e0246274.
- Wancharoen, S., & Wipatayotin, A. (2020, March 22). Aswin orders 'soft lockdown' in capital. *Bangkok Post*. <https://www.bangkokpost.com/thailand/general/1883645/aswin-orders-soft-lockdown-in-capital>

# Appendix A

## Conceptual Framework.



**Figure 1: Media Coverage and the Pandemic.**



**Figure 2: Media Coverage, the Pandemic, and IPO Initial Returns.**

## Appendix B

### Variable Description.

<i>BIG4</i>	An indicator variable that takes a value of 1 if a firm's annual financial statements are audited by the Big 4 auditors: Ernst & Young, Deloitte, KPMG, and PwC, and 0 otherwise
<i>DE</i>	Debt to equity ratio before an IPO
<i>EQUITYOFFER</i>	Percentage of equity offered
<i>FB</i>	Total number of posts about an IPO firm on the SET Thailand Facebook page
<i>GROWTH</i>	(Earnings before interest and tax before an IPO – Earnings before interest and tax 12 months before an IPO) / Earnings before interest and tax 12 months before an IPO
<i>LNOFFERSIZE</i>	The natural log of offer size
<i>MEDIA</i>	An IPO firm's media coverage score
<i>NETINCOME</i>	Net income after tax before an IPO
<i>NEWNORMAL</i>	An indicator variable that takes a value of 1 if a firm's IPO is during the new normal period, and 0 otherwise
<i>PR</i>	Total news stories about an IPO firm on online news websites
<i>PREIPO</i>	Total number of firm's IPOs before each firm offers its equity
<i>RETURN</i>	(Close price on the first trading day – IPO final offer price)/IPO final offer price
<i>RETURN_HIGH</i>	(Highest price on the first trading day – IPO final offer price)/IPO final offer price
<i>RETURN_PRIM</i>	(Open price on the first trading day – IPO final offer price)/IPO final offer price
<i>RETURN_SEC</i>	(Close price on the first trading day – Open price on the first trading day)/Open price on the first trading day
<i>SET</i>	An indicator variable that takes a value of 1 if a firm's IPO is on the SET, and 0 if a firm's IPO is on the MAI
<i>TW</i>	Total number of tweets about an IPO firm on Twitter



**Table 1: Distribution of IPOs.**

Panel A: IPO Activities by Year.

Year	SET		MAI		SET & MAI	
	Total Offer Size (THB million)	Number of IPOs	Total Offer Size (THB million)	Number of IPOs	Total Offer Size (THB million)	Number of IPOs
2015	48,425.57	20	4,642.83	13	53,068.40	33
2016	27,300.07	10	5,788.94	13	33,089.01	23
2017	95,567.58	21	9,382.17	17	104,949.75	38
2018	23,915.40	7	5,223.02	11	29,138.42	18
2019	101,465.43	11	5,121.30	17	106,586.73	28
2020	155,386.37	14	4,035.26	12	159,421.63	26
<b>Total</b>	452,060.42	83	34,193.52	83	486,253.94	166

Panel B: IPO Activities by Month.

Year	Jan	Feb	Mar	Apr	May	June	July	Aug	Sept	Oct	Nov	Dec	Total
2015	2	3	1	0	4	1	3	4	2	4	4	5	33
2016	0	0	2	1	2	1	4	1	3	3	4	2	23
2017	0	4	1	4	1	0	2	2	5	3	8	8	38
2018	0	1	2	0	0	1	1	1	1	6	3	2	18
2019	2	1	1	0	3	2	2	2	0	4	7	4	28
2020	1	1	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>2</b>	<b>2</b>	<b>1</b>	<b>9</b>	<b>6</b>	<b>4</b>	26
<b>Total</b>	5	10	7	5	10	5	14	12	12	29	32	25	166

Note: IPOs during the new normal period are bold.

**Table 2: Summary Statistics.**

Panel A: Characteristics of IPO Firms (N = 166).

Variables	Mean	Std. Dev.	Median	Min.	Max.
<i>RETURN</i>	0.3384	0.4969	0.1864	-0.3007	2.0000
<i>FB</i>	0.8735	0.9858	1.0000	0.0000	4.0000
<i>TW</i>	2.5482	6.1136	0.0000	0.0000	46.0000
<i>PR</i>	4.5241	3.9538	4.0000	0.0000	25.0000
<i>MEDIA</i>	15.0964	9.1742	14.5000	1.0000	38.0000
<i>NEWNORMAL</i>	0.1446	0.3527	0.0000	0.0000	1.0000
<i>BIG4</i>	0.6265	0.4852	1.0000	0.0000	1.0000
<i>SET</i>	0.5000	0.5015	0.5000	0.0000	1.0000
<i>OFFERSIZE</i>	2,929.24	8,702.81	580.50	60.72	78,124.20
<i>EQUITYOFFER</i>	0.2674	0.0545	0.2589	0.1000	0.5854
<i>PREIPO</i>	14.0964	9.2325	13.0000	0.0000	37.0000

Panel B: Comparison between IPO Firms in the Pre-Pandemic Period and IPO Firms in the New Normal Period.

Variables	Pre-COVID19 Pandemic (N = 142)				New Normal (N = 24)				Difference in Mean Values
	Mean	Std. Dev.	Min.	Max.	Mean	Std. Dev.	Min.	Max.	
RETURN	0.3079	0.4511	-0.3007	2.0000	0.5190	0.6956	-0.2520	2.0000	0.2111 (1.44)
FB	0.6127	0.6826	0.0000	3.0000	2.4167	1.1001	1.0000	4.0000	1.8040 *** (7.78)
TW	1.7254	3.1536	0.0000	14.0000	7.4167	13.3512	0.0000	46.0000	5.6913 ** (2.08)
PR	4.2535	3.8101	0.0000	25.0000	6.1250	4.4752	1.0000	22.0000	1.8715 * (1.93)
BIG4	0.6127	0.4889	0.0000	1.0000	0.7083	0.4643	0.0000	1.0000	0.0957 (0.93)
SET	0.4930	0.5017	0.0000	1.0000	0.5417	0.5090	0.0000	1.0000	0.0487 (0.43)
OFFERSIZE	2,853.39	8,587.90	103.60	78,124.20	3,378.02	9,537.61	60.72	45,383.80	524.6270 (0.25)
EQUITYOFFER	0.2683	0.0551	0.1000	0.5854	0.2625	0.0518	0.1349	0.3750	-0.0057 (-0.50)
PREIPO	14.1972	9.5667	0.0000	37.0000	13.5000	7.0711	2.0000	25.0000	-0.6972 (-0.42)

Note: This table reports descriptive statistics and a t-test assessing whether there is a difference in mean values between IPO firms in the pre-pandemic and IPO firms the new normal periods. T-statistics are reported in parentheses. \*\*\*, \*\*, and \* denote significance at the 1, 5, and 10 percent levels, respectively. OFFERSIZE is in million baht. Variable descriptions are in the Appendix B.

Table 3: Pearson Correlation.

Variables	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)
(1) RETURN	1										
(2) FB	0.0903	1									
(3) TW	0.0685	0.2248*	1								
(4) PR	-0.1166	0.1664*	0.3338*	1							
(5) MEDIA	0.0446	0.0784	0.3593*	0.5711*	1						
(6) NEWNORMAL	0.1498*	0.6455*	0.3284*	0.1670*	-0.0783	1					
(7) BIG4	-0.0469	0.0653	0.1716*	0.1121	0.1232	0.0695	1				
(8) SET	-0.1057	0.1410*	0.1749*	0.1116	0.1838*	0.0343	0.2989*	1			
(9) LNOFFERSIZE	-0.2657*	0.0574	0.3868*	0.4156*	0.3737*	-0.0593	0.3731*	0.6373*	1		
(10) EQUITYOFFER	-0.1569*	-0.0206	-0.0186	0.0021	-0.0769	-0.0371	-0.1132	-0.0216	0.0813	1	
(11) PREIPO	-0.1539*	-0.1252	-0.0484	-0.1030	0.0732	-0.0266	-0.0149	0.1034	0.0995	-0.0644	1

Note: This table reports the Pearson correlation coefficient between the variables. \* denotes significance at the 10 percent level. Variable descriptions are in the Appendix B.

**Table 4: Media Coverage and the Pandemic.**

Variables	Ordered Probit		Tobit	
	FB (1)	TW (2)	PR (3)	MEDIA (4)
<i>NEWNORMAL</i>	2.2850*** (7.661)	9.0100*** (4.242)	2.4329*** (3.123)	-1.5438 (-0.831)
<i>BIG4</i>	-0.1759 (-0.846)	2.1459 (1.095)	-0.8257 (-1.322)	-0.6898 (-0.466)
<i>SET</i>	0.3487 (1.430)	-4.4532*** (-2.041)	-2.6671*** (-3.668)	-1.8345 (-1.066)
<i>LNOFFERSIZE</i>	0.0914 (0.961)	4.5767*** (5.624)	2.1452*** (7.474)	3.0036*** (4.398)
<i>EQUITYOFFER</i>	-0.5418 (-0.317)	-14.5106 (-1.011)	-6.2441 (-1.209)	-18.5403 (-1.509)
<i>PREIPO</i>	-0.0283*** (-2.653)	-0.0445 (-0.513)	-0.0590* (-1.946)	0.0161 (0.223)
Constant cut1	0.1763 (0.229)			
Constant cut2	1.6893** (2.170)			
Constant cut3	2.5281*** (3.135)			
Constant cut4	3.5629*** (4.154)			
Constant		-28.1177*** (-4.278)	-4.7789** (-2.065)	2.9360 (0.532)
sigma		8.4354*** (10.820)	3.4380*** (17.211)	8.2238*** (18.221)
Industry	Yes	Yes	Yes	Yes
Observations	166	166	166	166
Pseudo R-squared	0.201	0.094	0.069	0.029
Log likelihood	-162.30	-284.71	-419.78	-585.31
Model Chi-squared	81.64	59.06	62.62	35.31

**Note:** This table reports the results for Equation (1). In model (1), an Ordered Probit is estimated, and the dependent variable is *FB*. In models (2)–(4), a Tobit model is estimated, and the dependent variables are *TW*, *PR* and *MEDIA*, respectively. Z-statistics in parentheses. \*\*\*, \*\*, and \* denote significance at the 1, 5, and 10 percent levels, respectively (for two-tailed test). Variable descriptions are in the Appendix B

Table 5: Media Coverage, the Pandemic, and IPO Initial Returns.

Variables	RETURN	
	(1)	(2)
<i>MEDIA</i>	0.0083** (0.0042)	0.0082* (0.0043)
<i>NEWNORMAL</i>	0.1472 (0.0996)	0.1199 (0.2092)
<i>MEDIA*NEWNORMAL</i>		0.0020 (0.0136)
<i>BIG4</i>	-0.0234 (0.0792)	-0.0215 (0.0804)
<i>SET</i>	0.1342 (0.0923)	0.1346 (0.0927)
<i>LNOFFERSIZE</i>	-0.1227***	-0.1241***
<i>EQUITYOFFER</i>	(0.0386)	(0.0399)
<i>PREIPO</i>	-1.1457* (0.6619)	-1.1273* (0.6755)
Constant	-0.0085** (0.0039)	-0.0085** (0.0039)
Industry	1.5407*** (0.2953)	1.5443*** (0.2973)
Observations	Yes 166	Yes 166
R-squared	0.283	0.283

Note: This table reports the OLS results for Equation (2), where the dependent variable is first-day initial returns. T-statistics are reported in parentheses. \*\*\*, \*\*, and \* denote significance at the 1, 5, and 10 percent levels, respectively (for two-tailed test). Variable descriptions are in the Appendix B.

Table 6: Media Coverage, the Pandemic, and Decomposition of IPO Initial Returns.

Variables	RETURN_PRIM (1)	(2)	(3)	RETURN_SEC (4)	(5)	RETURN_HIGH (6)
<i>MEDIA</i>	0.0102** (0.0042)	0.0101** (0.0043)	-0.0007 (0.0016)	-0.0006 (0.0017)	0.0123** (0.0048)	0.0117** (0.0049)
<i>NEWNORMAL</i>	0.1689* (0.0993)	0.1468 (0.2064)	-0.0078 (-0.0382)	0.0070 (0.0794)	0.2410** (0.1130)	0.1285 (0.2345)
<i>MEDIA*NEWNORMAL</i>		0.0016 (0.0134)		-0.0011 (0.0052)		0.0083 (0.0152)
<i>BIG4</i>	-0.0823 (0.0789)	-0.0813 (0.0796)	0.0302 (0.0304)	0.0295 (0.0306)	-0.0523 (0.0897)	-0.0472 (0.0904)
<i>SET</i>	0.1031 (0.0922)	0.1035 (0.0925)	0.0205 (0.0355)	0.0203 (0.0356)	0.1166 (0.1048)	0.1182 (0.1051)
<i>LNOFFERSIZE</i>	-0.1306*** (0.0388)	-0.1317*** (0.0400)	0.0000 (0.0149)	0.0008 (0.0154)	-0.1755*** (0.0442)	-0.1811*** (0.0454)
<i>EQUITYOFFER</i>	-0.7762 (0.6607)	-0.7608 (0.6749)	-0.2203 (0.2543)	-0.2306 (0.2597)	-0.9674 (0.7515)	-0.8885 (0.7669)
<i>PREIPO</i>	-0.0063 (0.0039)	-0.0063 (0.0039)	-0.0016 (0.0015)	-0.0017 (0.0015)	-0.0073* (0.0044)	-0.0073 (0.0044)
Constant	1.4424*** (0.2941)	1.4453*** (0.2960)	0.0808 (0.1132)	0.0789 (0.1139)	1.8975*** (0.3345)	1.9121*** (0.3363)
Industry	Yes	Yes	Yes	Yes	Yes	Yes
Observations	166	166	166	166	166	166
R-squared	0.241	0.241	0.115	0.116	0.274	0.276

Note: This table reports the OLS results for Equation (2), where the dependent variables are first-day primary returns (*RETURN\_PRIM*), secondary returns (*RETURN\_SEC*), and maximum returns (*RETURN\_HIGH*). T-statistics are reported in parentheses. \*\*\*, \*\*, and \* denote significance at the 1, 5, and 10 percent levels, respectively (for two-tailed test). Variable descriptions are in the Appendix B

**Table 7: Robustness Checks**

Panel A: Media Coverage and the Pandemic.

Variables	Ordered Probit		Tobit	
	(1) <i>FB</i>	(2) <i>TW</i>	(3) <i>PR</i>	
<i>NEWNORMAL</i>	2.0560*** (5.566)	4.6689** (2.225)	2.0808** (2.208)	
<i>NETINCOME</i>	0.0063* (1.768)	0.0012 (0.054)	0.0272*** (2.683)	
<i>GROWTH</i>	-0.1326 (-0.673)	0.1487 (0.297)	0.0971 (0.417)	
<i>DE</i>	0.0011 (0.666)	0.0073 (0.678)	-0.0028 (-0.597)	
Control Variables	Yes	Yes	Yes	
Industry	Yes	Yes	Yes	
Observations	128	128	128	
Pseudo R-squared	0.183	0.079	0.089	
Log likelihood	-121.27	-231.15	-319.42	
Model Chi-squared	54.42	39.85	62.51	

**Note:** This table reports the results for Equation (1) with profitability, growth, and leverage. An Ordered Probit is estimated, and the dependent variable is *FB*. A Tobit model is estimated, and the dependent variables are *TW* and *PR*. Z-statistics in parentheses. \*\*\*, \*\*, and \* denote significance at the 1, 5, and 10 percent levels, respectively (for two-tailed test). Variable descriptions are in the Appendix B.

Panel B: Media Coverage, the Pandemic, and IPO Initial Returns.

Variables	<i>RETURN</i>	
	(1)	(2)
<i>MEDIA</i>	0.0087** (0.0043)	0.0090** (0.0044)
<i>NEWNORMAL</i>	0.1848 (0.1205)	0.2601 (0.2710)
<i>MEDIA*NEWNORMAL</i>		-0.0055 (0.0178)
<i>NETINCOME</i>	0.0013 (0.0013)	0.0013 (0.0013)
<i>GROWTH</i>	-0.0009 (0.0297)	-0.0010 (0.0299)
<i>DE</i>	-0.0006 (0.0006)	-0.0006 (0.0006)
Constant	1.5050*** (0.3890)	1.5002*** (0.3909)
Control Variables	Yes	Yes
Industry	Yes	Yes
Observations	128	128
R-squared	0.382	0.383

**Note:** This table reports the OLS results for Equation (2). The dependent variable is first-day initial returns and profitability, growth, and leverage are included. T-statistics are reported in parentheses. \*\*\*, \*\*, and \* denote significance at the 1, 5, and 10 percent levels, respectively (for two-tailed test). Variable descriptions are in the Appendix B.