

Initial Public Offerings News in Social Media and Investor Sentiments

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Initial Public Offerings News in Social Media and Investor Sentiments

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ABSTRACT: Social media has provided the opportunity for companies to build self-image and also to stimulate significant attention and positive emotional responses to a passive participant. This practice is characterized by communication, comments, mention, reactions towards information and expression of sentiments, hence, an increase in the number of companies with public interest and media coverage has a direct influence on the investors. The purpose of this study, therefore, is to determine the effect of social media on investor sentiment in the Indonesian capital market in order to obtain an overview to follow the market and predict future *returns* stock and trade volumes. The results showed that the neutral sentiment does not affect the stock trading volume, which was the inverse for the negative and positive sentiments, although they collectively had no effect on *returns* stock on Instagram.

1 INTRODUCTION

The phenomenon of an initial public offering of shares is a situation followed by an abnormal movement of price on the first day, illustrating the poor correspondence of stock price movement towards the efficient market hypothesis. This discrepancy (empirical deviation) is often referred to as an efficient market anomaly. Stewart (2000) explained *behavioral finance* as a study of psychology and financial science phenomena, which shows the investors' conduct during the process of understanding and responding to information. Tauni (2017) explained the influence of these psychological factors in the determination of how investors make decisions, known to be likely influenced by the observations of others and some individuals during social interactions. Furthermore, the continuous development of technology provides innovations leading to the emergence of social media, thus enhancing the ease of assessing all important information about the company. These characteristics media platforms, alongside its role as a place for social interaction, are of high relevance to investors. In addition, the sentiment is a picture of their emotions and thoughts channeled through social media, where the positive forms possibly improve the *brand image* and reputation, while the negative tend to cause damage. These characteristics eventually influence the determination of investment decisions.

Nussbaumer (2011) emphasized the importance of remaining competitive through the utility of various information made available in print media and online sources. Therefore, it is imperative to understand the search process and the choice of information channels, and was supported by (Sattar Chaudhry, 2013), which stated its complexity in the general business sector and particularly in the investment sector. Furthermore, various types of financial and non-financial data are required to back up financial analysts (Sattar Chaudhry and Alansari, 2013), based on the assumption that most investors obtain information through the use of smartphones, instant messages and e-mails every day, and a few tend to adopt the use of Facebook, Twitter, blogs and wikis, and Sattar Chaudhry, (2013) confirmed the enormous amount of time spent

during searches. Furthermore, investors are now enabled to view posts, rate news, and attach comments after the emergence of social media. Empirically, several studies by (Bollen 2011) were identified as the first to use Twitter sentiment in the prediction of stock market performance, showing evidence on the influence of investor sentiment. The research results indicate the influence of the existing atmosphere on *public happiness* as a positive sentiment that possibly predicts stock price movements. Coviello, (2014); and Kramer, (2014) supported the spread of emotions transmitted among internet users through text-based communication.

Concerning social media, Muchnik (2013) and Trinkle (2015) demonstrated the possibility of participants' perceptions and reactions towards news to be influenced by the opinion of the majority, expressed through social media comments. Chen (2014) conducted a textual analysis of negative opinions and comments contained in articles specifically based on investors in the USA, and a decline in *returns* stock was observed. Ranco, (2015) showed the influence of positive sentiment on the increase in *Cumulative Abnormal Return* (CAR) of 30 companies in the DJIA Index, while Nofer, (2015) examined the effects of emotional contagion in financial settings (using the Twitter mood and its effect) on stock returns, and the results demonstrated evidence that supports its transmission behavioral influence. Empirically, most studies observed to have examined the impact of Twitter and StockTwits in the financial context tend to mainly focus on testing the predictive power of sentiment/information for stock market performance. This was supported by (Jaziri, 2018), known to have related the positive emotions at the time of Ramadan with the significant effect of increasing *returns* stock on financial markets in Arabia. Furthermore, the effect was perceived by Arab financial markets within the first 10 days and 10 days after a positive sentiment on social media.

Alexander (2014) stated the central role of social media in "eliminating the asymmetry" of information between various agents, to ascertain if it is up to date. Also, they are known to allow two-way communication, including amongst individuals and between individuals and companies that allow not only communication of information to investors but also encourages the feedback of perceptions (Cade, 2018). Furthermore, there are known social ties that cause an individual to place higher trust on others or groups, due to the extent of personal interactions with the information sources through social media, as well as the interpersonal connection (Elliott, 2018). This study also established the possibility of investors to develop stronger social ties and higher trust when CEOs communicate company news through a personal Twitter account. Ali, (2018) reported evidence on an existing relationship between investor sentiment and *returned* stock in the context of the capital market, although research conducted by We Are Social (2018) stipulated that about 120 million Indonesians use mobile devices, encompassing smartphones or tablets to access social media. ComScore (2017) reported that the application of *Instagram* has more users than *Facebook*. The purpose of this study, therefore, is to determine the effect of social media on investor sentiment in the Indonesian capital market, in order to provide investors with an overview for following the market, predicting future *returns* stock, and trading volumes.

2. RESEARCH METHODS

This research is a combination of qualitative and quantitative approaches. (1) The qualitative approach, characterized by utilizing the technique of *Content Analysis* to collect and evaluate the data in the form of words, pictures, symbols, meanings, themes and messages, communicated via written text, illustrated or discussed in books, newspapers, articles, magazines, speeches, and others. This was conducted on the sentiments contained in the comments of investors through the Instagram handle, followed by analysis using an automatic machine (NVIVO 12) for coding the words contained. Furthermore, the proficiency level of the meanings was obtained using *human coding*, followed by coding to alter the aspect that represents variables into numbers. (2) The quantitative approach was performed to link the results of *Content Analysis* with stock movements, using causality (regression) analysis.

3. RESEARCH RESULTS

This study uses a regression estimation approach to predict *stock returns* and *trading volumes* at the time of an IPO. In addition, multiple regression analysis was used with OLS (*Ordinary Least Square*), and the following results were obtained to predict *stock returns* and *trading volume*.

Table 1. Estimated Regression to Predict Return and Trading Volume

Variable	Model 1		Model 2		Model 3		Model 4	
	β	p-value	β	p-value	β	p-value	β	p-value
Neutral Sentiment	-0,014	0,116	-0,121	0,641	-0,102	0,725	-0,019	0,049**
Negative sentiment	0,006	0,170	-0,2129	0,103*	-0,242	0,090*	0,007	0,102*
Positive sentiment	-0,001	0,923	0,2687	0,069*	0,293	0,056*	-0,000	0,983
Liquidity					0,003	0,838	-0,000	0,755
Solvency Asset					0,026	0,439	-0,002	0,052**
Solvency Equity					-0,002	0,905	0,001	0,052**
Return on Assets					-0,151	0,091*	0,004	0,118
Return on Equity					0,033	0,247	-0,001	0,359
R2	0,127		0,317		0,111		0,239	

Return stock either profit or loss derived from stock investments. Returns Stock derived from the difference between the stock prices of the current to the previous period. Trading volume data uses trading volume data on the secondary market from the first day of trade. Liquidity uses the current ratio of RL = current assets / current debt. Asset Solvency is a Debt Ratio that compares total debt (total liabilities) with assets owned. Equity Solvency explains the relative portion between equity and debt used to finance company assets. Debt to Equity Ratio (DER) compares the total liabilities with equity. ROA (return on assets) refers to the profitability (profitability) and operational efficiency (operational efficiency). ROA was calculated by net income / total assets, while ROE is calculated with net income / total equity. The sign *** = significant at the 1% level, ** = significant at the 5% level, and * = significant at the 10% level.

The results showed that the first model neutral sentiments had no effect on *returns* stock, which is indicated by the inability for neutral sentiment to affect the brand image, as well as the company reputation. Furthermore, the affiliated information on Instagram was observed not to encourage the determinants of investors buying or selling actions. These are known to affect stock price movements, which is why *returns* from stocks do not demonstrate an increase or decrease. Meanwhile, the second model shows the inclusion of the control variable in the model; hence, it is established that the neutral sentiment has a significant effect on *returns* stock. This indicates that the inclusion of other information influences the effect of neutral sentiment on the *brand image* and reputation of a company. Furthermore, the related information on Instagram was observed to have encouraged the determination of investors towards buying and selling actions that possibly affect the movement of stock prices; thus, *returns* also increase or decrease.

The results of subsequent studies indicate that negative sentiment does not affect *returns* stock in the first model, although this is encouraged by the inclusion of some information in the second model. These results support the research conducted by Chen (2014) and He (2016), while Ranco (2015) reported the effect of negative sentiment on the reduction of CAR in 30 shares of companies listed on DJIA. Furthermore, the results of this current investigation indicate the influence of the negative sentiment observed on Instagram on the rise in stock prices, which subsequently increases the value of *returns* stock, therefore demonstrating the irrational behavior of investors. Based on the results, it is also established that investors at the time of the IPO desire more short-term profits, and are more vulnerable to stock frying, hence, the upsurge in the number of shares on the first day on the secondary market that enter the ARA limit, followed by a drop again 3 days after, which touches the ARB. This is, therefore, the cause of the IPO share price increase, in the presence of negative sentiment, due to the fact that investors often hunt for short-term profits. Conversely, the positive sentiment in the first and second model illustrates the absence of any influence on *returns* stock. This indicates the inability of positive information on Instagram to encourage changes in stock prices. Thus *returns* from shares are unaffected. Also, this occurs because investors tend to take advantage of the positive sentiments that day, and no significant effect was found towards returns, which confirms that investors are not affected.

The results showed that neutral sentiment on Instagram had no effect on stock trading volume,

both in the third and fourth models, indicating the inability to affect the increase or decrease in market stock prices. Furthermore, the absence of changes in prices causes investors not to take action on buying or selling shares. Hence, there is no change in the trading volume, and the market does not react. Meanwhile, a negative sentiment that appears on Instagram in the third and fourth model is seen to harm stock trading volumes, which indicates the investors' tendency to take advantage of the situation, and make transactions during a rise in stock price, in order to consequently sell shares and avoid deeper losses. Furthermore, the high activity performed causes a rise in the volume of stock trading, demonstrating the influence of negative sentiment on Instagram on a particular day. This was in line with research conducted by Joseph (2011), which stated the effect of high sentiment on trade volume.

The results of subsequent studies indicate the influence of positive sentiment on Instagram on the increasing volume of stock trading in the third and fourth models. This prompts an increase in investor activity in the aspect of making transactions, thus taking advantage of the situation, in order to obtain the highest *return*, subsequently leading to an increase in stock market trading volume. The results support the findings of Joseph (2011), which stipulated the influence of positive sentiments on the volume of stock trading.

4. CONCLUSION

Based on the results and discussion, the results showed the inability for the neutral sentiment on Instagram to affect the stock trading volume, while both negative and positive had a different effect. Furthermore, they collectively did not influence *returns* stock.

The limitation of this study is observed in the constraint of examining investor sentiment only on Instagram. Hence, future research ought to investigate other social media.

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