

The Influence of Retail Investor Activity and Sentiment on Social Media on Stock Market Dynamics in Bali

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ABSTRACT

The growing participation of retail investors in social media communities has created a pressing need to understand how their activities and sentiments influence stock market dynamics. This study aims to examine the effect of investor activity and sentiment on social media on the trading volume and price volatility of small-cap stocks. A quantitative approach was adopted by surveying 200 respondents who are active in online stock communities. The data were analyzed using multiple linear regression. The results indicate that both investor activity and sentiment are positively associated with trading volume and price volatility. The regression models explain more than half of the variation in the two dependent variables. The study concludes that social media plays a significant role as a space that shapes the behavior and investment decisions of retail investors in the digital stock market.

Keywords: Retail Investor; Social Media; Sentiment; Trading Volume; Price Volatility

Pengaruh Aktivitas dan Sentimen Investor Ritel di Media Sosial terhadap Dinamika Saham di Bali

ABSTRAK

Fenomena meningkatnya partisipasi investor ritel dalam komunitas media sosial mendorong kebutuhan untuk memahami pengaruh aktivitas dan sentimen mereka terhadap dinamika pasar saham. Penelitian ini bertujuan untuk menguji pengaruh aktivitas investor dan sentimen di media sosial terhadap volume perdagangan dan volatilitas harga saham berkapitalisasi kecil. Penelitian menggunakan pendekatan kuantitatif dengan survei terhadap 200 responden yang aktif dalam komunitas saham daring. Analisis data dilakukan melalui regresi linier berganda. Hasil menunjukkan bahwa baik aktivitas maupun sentimen investor memiliki hubungan positif terhadap volume perdagangan dan volatilitas harga. Model regresi menjelaskan lebih dari separuh variasi kedua variabel dependen. Penelitian ini menyimpulkan bahwa media sosial berperan penting sebagai ruang pembentuk perilaku dan keputusan investasi investor ritel di pasar saham digital.

Kata Kunci: Investor Ritel; Media Sosial; Sentimen; Volume Perdagangan; Volatilitas Harga

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INTRODUCTION

Individual investor behavior has undergone significant changes due to increased access to information through social media and online community platforms. Research by (Li et al., 2014) suggests that the perception of being “informed” can drive financial decision-making, even when the information acquired may not be valid or relevant. This phenomenon is amplified in the digital environment, where platforms such as Reddit and X (Hoang & Kauffman, 2018; Pedersen, 2022) serve as active discussion arenas for retail investors. The concept of *narrative economics* by (Shiller, 2020) explains how viral and popular stories on social media can shape market perceptions and behaviors, resulting in price distortions that are not supported by fundamental values. This kind of collective behavior is further supported by studies (Barber et al., 2022; Surowiecki, 2004) which find that the so-called wisdom of the crowd may devolve into herd behavior when investment decisions are driven by short-term sentiment, particularly during periods of high market volatility.

Retail investors in the Indonesian stock market exhibit a similar trend, as evidenced by the active participation in stock discussions on Telegram groups, Stockbit forums, and Facebook communities. As highlighted in studies by (Allen et al., 2022) and (Caron et al., 2021), high levels of online activity are often followed by surges in trading volume, particularly in small-cap stocks that are highly sensitive to market sentiment. Therefore, it is crucial to gain a deeper understanding of the role of social media sentiment and informedness in shaping domestic market behavior (Li et al., 2014).

The digital transformation of the financial sector has driven the emergence of new investment behaviors, particularly among retail investors who are increasingly active in using social media as a source of information.

In Indonesia, this phenomenon is clearly reflected in the growing participation of individuals in stock discussions on platforms such as Telegram, Stockbit, and X (formerly Twitter). This trend indicates that sentiments formed on social media have significant potential to influence investment decisions and stock price movements—even in the absence of any underlying fundamental changes in the companies involved.

Allen et al., (2022) demonstrated that coordinated action among retail investors on Reddit triggered spikes in trading volume and caused significant changes in market quality during the GameStop short squeeze event. Caron et al., (2021) found that Reddit user activity was strongly correlated with GME trading volume, while (Bollen et al., 2011) and (Rao & Srivastava, 2012) confirmed the predictive power of social media sentiment analysis on stock market movements. On the other hand, (Kim et al., 2023) noted that the short squeeze phenomenon violated the principles of efficient markets and led to pricing anomalies. In the Indonesian context, (Ahyyaruddin et al., 2017) observed that online stock discussion forums can influence purchasing decisions related to small-cap stocks. However, such studies remain limited to correlation analyses and have yet to explicitly integrate theories such as informedness or momentum trading, as seen in the approach of (Kim et al., 2023).

Although international studies have demonstrated the influence of social media sentiment on stock market dynamics, similar research in Indonesia remains

scarce—particularly those grounded in strong theoretical frameworks such as informedness theory and narrative economics. This study is especially relevant given that the majority of investors on the Indonesia Stock Exchange (IDX) are retail investors, who tend to be highly responsive to informal information circulated on social media. The novelty of this research lies in its effort to formulate a model that links the activity and sentiment of online stock communities with the volatility and trading volume of small-cap stocks—an area that has yet to be widely explored in the context of emerging markets like Indonesia.

This study aims to analyze the influence of retail investor activity and sentiment on social media on the trading volume and volatility of stocks in Indonesia, particularly small-cap stocks, using the theoretical frameworks of informedness and investor sentiment within a momentum-based trading approach. Informedness theory explains the extent to which investors accurately understand and access market information (Zhang et al., 2019), while investor sentiment reflects psychological or emotional responses to the information available (Baker & Wurgler, 2007). Within the context of momentum-based trading—an investment strategy based on past price trends (Jegadeesh & Titman, 1993), these three concepts are interrelated. When the level of informedness is low, investors are more susceptible to being influenced by market sentiment, which in turn can amplify momentum effects. Conversely, well-informed investors tend to make rational decisions and are less likely to be swayed by psychological trends.

Theory of Planned Behavior (TPB) explains that an individual's intention to act is influenced by three main determinants: attitude, subjective norms, and perceived behavioral control (Ajzen, 1991). In the context of retail investors in Bali, social media activity on platforms such as Telegram and Stockbit shapes positive attitudes toward certain stocks through exposure to information and the shared experiences of community members (Zhang et al., 2019). Subjective norms emerge from community-driven encouragement or trends that create social pressure to follow collective behavior. Perceived behavioral control arises from the investor's belief that they are capable of making decisions because they feel supported by the community, even though the information may not be entirely accurate. These factors drive the collective intention of investors to act, which results in spikes in trading volume and fluctuations in stock prices in Bali.

According to studies by (Li et al., 2014; Smith et al., 2011) informedness is defined as an individual's subjective perception that they possess sufficient knowledge to make decisions, even though such information may be biased. (Shiller, 2020) through the theory of narrative economics, emphasizes that viral narratives circulating in society can exert a strong influence on financial markets, often surpassing the impact of fundamental data. (Allen et al., 2022; Caron et al., 2021) showed that Reddit activity was correlated with surges in trading volume during the GameStop case. (Ahyyaruddin et al., 2017) confirmed that discussions in local investor forums in Indonesia influence buying interest in specific stocks. (Pradana et al., 2020) noted that positive sentiment on social media is correlated with rising prices in second-tier stocks. Active discussions on social platforms help form positive attitudes toward stock purchases, reinforced by social norms within

the community that drive collective action. These factors strengthen the intention to buy, thereby increasing trading volume (Ajzen, 1991; M. Caron et al., 2021).

H₁: Retail investor activity on social media significantly affects the trading volume of small-cap stocks.

(Kim et al., 2023) found that the extreme price fluctuations in the case of GameStop were driven more by social sentiment than by fundamental information. (Bollen et al., 2011) stated that collective mood on X (formerly Twitter) can predict market direction. (Dixit, 2024) also noted that surges in public emotion can lead to high volatility effects. In the Indonesian context, (Nurjanah et al., 2024) found that movements in second-tier stock prices are often triggered by public perception on social media. Similarly, (Soedarbe et al., 2021) concluded that the dominance of either positive or negative sentiment in online forums increases the risk of short-term price fluctuations. Rapidly formed collective sentiment on social media leads investors to act impulsively, resulting in sharp price swings. This illustrates the influence of social norms and perceived behavioral control on market volatility (Allen et al., 2022; Shiller, 2020).

H₂: Retail investor activity on social media significantly affects the price volatility of small-cap stocks.

(Rao & Srivastava, 2012) demonstrated that sentiment on X (formerly Twitter) is significantly correlated with spikes in stock trading volume. (Li et al., 2014) showed that collective sentiment influences investors' intentions to engage in transactions. (Gao et al., 2022) also found that sentiment analysis can be used to predict market activity. In the Indonesian context, (Dahar et al., 2024; Soedarbe et al., 2021) noted that positive information within online communities can trigger buying intentions. (Istiqomah et al., 2021) further added that investor sentiment acts as a mediating variable between information and transaction intentions.

When positive sentiment dominates online communities, investors feel socially supported in their decisions, thereby increasing their buying intentions and driving up trading volume (Bollen et al., 2011; Rao & Srivastava, 2012).

H₃: Investor sentiment significantly affects the price volatility of small-cap stocks.

(Pedersen, 2022) showed that investors' social activity can create unstable market expectations. (Allen et al., 2022) also noted that the volume of discussions can trigger volatility when investors act simultaneously. (Barber et al., 2022) highlighted the "social tipping point" effect on social platforms, which amplifies price fluctuations. In the Indonesian context, (Nurlaily et al., 2023) found that online forums can lead to price bubble effects. (Soedarbe et al., 2021) further observed that imbalances in information stemming from social media contribute to unexpected volatility. Intense discussions lacking strong analytical foundations often lead to inconsistent speculative expectations and decisions, which in turn generate short-term fluctuations in stock prices (Kim et al., 2023; Pedersen, 2022).

H₄: Investor sentiment significantly affects the trading volume of small-cap stocks.

The Theory of Planned Behavior (TPB), developed (Ajzen, 1991) is one of the most influential grand theories for explaining individual behavior in the context of decision-making. TPB posits that a person's intention to perform a given behavior is influenced by three main components: attitude toward the behavior, subjective norms or social pressure from the surrounding environment, and perceived behavioral control. In the context of retail investors in Indonesia's

capital market, social media platforms such as Telegram, Stockbit, and Facebook serve as interactive spaces that collectively shape attitudes, social norms, and perceived control. When investors actively participate in stock discussions, a perception emerges that they possess sufficient information (even if it is superficial), and that their buying or selling behavior is supported by the community thus generating a strong intention to take action in the market.

Discussion activities on stock community platforms help shape positive attitudes toward purchasing certain stocks. Combined with subjective norms from the community (e.g., calls to “pump stocks”), the intention to buy increases and materializes in high trading volumes. Widely spread sentiment – whether positive or negative – creates a collective perception that tends to be emotional. This reinforces attitudes and social pressure to act impulsively, which in turn significantly affects stock price fluctuations. When positive sentiment dominates social media, investors tend to feel social support for their decisions.

This strengthens their buying intention and contributes to an increase in trading volume. The frequency of discussions and intensity of conversations in online communities foster inflated expectations, followed by a belief that they are capable of making quick decisions. This effect produces collective reactions that amplify price volatility. Thus, TPB offers a solid foundation for understanding how digital social interaction shapes perceptions, expectations, and ultimately, the collective behavior of investors as reflected in trading volume and price volatility in Indonesia’s capital market. This study aims to test how the three determinants of TPB are actualized in the context of digital social platforms through the four proposed hypotheses.

RESEARCH METHODS

Primary data were collected using an online questionnaire developed based on constructs from the Theory of Planned Behavior (Ajzen, 1991). The questionnaire was distributed through social media platforms and online stock community forums such as Telegram, Stockbit, and Facebook Groups, which included participants from the Bali region. Each construct was measured using a five-point Likert scale, ranging from 1 (Strongly Disagree) to 5 (Strongly Agree).

This study employs a quantitative approach with an explanatory research design to examine the influence of retail investor activity and sentiment on social media on the trading volume and price volatility of small-cap stocks. Conducted in the Province of Bali, the study takes into account that retail investors in this region actively engage in national stock communities through online platforms such as Telegram, Stockbit, Facebook, and X (formerly Twitter). Although regionally based, the participation of local investors in national-level discussions makes them relevant subjects for analyzing sentiment dynamics and collective behavior in Indonesia’s capital market.

The population of this study consists of all retail investors in Bali who are active in online stock community forums and have conducted stock transactions within the last six months. The sampling technique used is purposive sampling, which involves selecting respondents based on specific criteria relevant to the research objectives. Since the exact number of retail investors active on stock-related social media platforms is unknown, the minimum sample size was

determined using the rule of ten items per variable, as recommended by Hair et al. (2014). With a total of 20 questionnaire items, the minimum required sample size was 200 respondents. The purposive sampling criteria included: (1) residing in Bali, (2) actively participating in online stock communities, and (3) having at least six months of stock trading experience. Data collection was conducted through an online questionnaire using Google Forms, which was distributed via Telegram groups and other stock-related communities with members from the Bali region. The research instrument was developed based on constructs from the Theory of Planned Behavior (Ajzen, 1991) and employed a five-point Likert scale, ranging from “strongly disagree” to “strongly agree.”

The variables in this study are defined both conceptually and operationally to ensure that each construct can be quantitatively measured through statements in the questionnaire. Retail investor activity on social media (X1) is defined as the level of individual engagement in consuming and contributing stock-related information via platforms such as Telegram, Stockbit, or Facebook. This activity is measured using five key indicators: the frequency of reading stock discussions (A1), the intensity of sharing opinions or information (A2), responses to discussions (A3), participation in online stock communities (A4), and the perception of being adequately informed through community discussions (A5). These indicators represent both passive and active participation in digital social interactions. This variable plays a key role in explaining the dynamics of community-based retail investment and serves as a foundation for analyzing its relationship with sentiment, trading volume, and price volatility.

Table 1. Operational Definition of the Variable: Investor Activity on Social Media (X1)

Variable	Dimension/Sub-variable	Indicator Statements	Reference
Investor Activity on Social Media (X1)	Participation Frequency	I regularly read stock discussions on Telegram / Stockbit / Facebook	(Ahyaruddin et al., 2017; M. Caron et al., 2021)
	Contribution Intensity	I frequently share opinions or information about stocks on social media	(Allen et al., 2022; Riski et al., 2024)
	Responsiveness to Discussions	I often respond to or reply to stock-related comments	(Giglio et al., 2020; Rao & Srivastava, 2012)
	Community Involvement	I am a member of an active stock community group on social media	(Li et al., 2014; Soedarbe et al., 2021)
	Perceived Informedness	I feel sufficiently informed after reading community stock discussions	(Hoang & Kauffman, 2018; Smith et al., 2011)

Source: Research Data, 2025

The variable of investor activity on social media (X1) consists of five dimensions: participation frequency, contribution intensity, responsiveness to discussions, community involvement, and perceived informedness. Participation frequency reflects the habit of reading stock-related discussions, while contribution intensity indicates how actively investors share their opinions. Responsiveness is demonstrated by the tendency to reply to comments;

community involvement refers to active membership in stock-related groups; and perceived informedness captures the investor's belief that they have acquired sufficient information from those discussions.

Table 2. Operational Definition of the Variable: Investor Sentiment (X2)

Variable	Dimension/Sub-variable	Indicator Statements	Reference
Investor Sentiment (X2)	Emotional Perception	I feel more optimistic about buying stocks after reading positive comments	(Bollen et al., 2011; Dixit, 2024)
	Reaction to Market Issues	I am easily influenced to buy/sell stocks due to viral news	(Kim et al., 2023; Soedarbe et al., 2021)
	Viral Narratives	Social media sentiment makes me believe that certain stocks will go up	(Li et al., 2014; Shiller, 2020)
	Market Euphoria	I often buy stocks just because they are being widely discussed	(Ahyaruddin et al., 2017; Allen et al., 2022)
	Attitude Uncertainty	Negative comments make me hesitant to hold certain stocks	(Rao & Srivastava, 2012; Soedarbe et al., 2021)

Source: Research Data, 2025

Investor sentiment (X2) is measured through five dimensions: emotional perception, reaction to market issues, viral narratives, market euphoria, and attitude uncertainty. Emotional perception reflects feelings of optimism after reading positive comments. Reaction to market issues indicates the tendency of investors to act impulsively in response to viral news. Viral narratives create a belief that certain stocks will rise. Market euphoria drives stock purchases due to widespread discussion, while attitude uncertainty reflects investor hesitation caused by negative comments.

Table 3. Operational Definition of the Variable: Stock Trading Volume (Y1)

Variable	Dimension/Sub-variable	Indicator Statements	Reference
Stock Trading Volume (Y1)	Transaction Frequency	I trade stocks more frequently after participating in online discussions	(Ahyaruddin et al., 2017; Gao et al., 2022)
	Transaction Value	The value of my transactions has increased due to encouragement from community discussions	(Caron et al., 2021; Istiqomah et al., 2021)
	Purchase Intention from Community Activity During Trading Hours	I buy stocks because they are widely and positively discussed by stock communities I actively trade stocks following the momentum of real-time discussions	(Barber et al., 2022; Rao & Srivastava, 2012) (Allen et al., 2022; Soedarbe et al., 2021)
	Intraday Trading	I have bought and sold stocks on the same day based on information from a group	(Kim et al., 2023; Nurjanah et al., 2024)

Source: Research Data, 2025

Stock Trading Volume (Y1) includes five dimensions: transaction frequency, transaction value, purchase intention driven by community influence, activity during trading hours, and intraday trading. Transaction frequency and value tend to increase due to discussions on social media. Purchase intentions arise when stocks are positively discussed within the community. Trading activity often follows the momentum of real-time discussions, and intraday trading occurs when investors buy and sell stocks within the same day based on information shared in online groups.

Table 4. Operational Definition of the Variable: Stock Price Volatility (Y2)

Variable	Dimension/Sub-variable	Indicator Statements	Reference
Stock Price Volatility (Y2)	Perceived Price Fluctuation	Stocks that are frequently discussed seem more unstable	(Nurjanah et al., 2024; Pedersen, 2022)
	Reaction to News	Stock prices rise and fall quickly due to news on social media	(Barber et al., 2022; Soedarbe et al., 2021)
	Instability Due to Euphoria	After market euphoria, the stocks I purchased tend to drop in price	(Kim et al., 2023; Soedarbe et al., 2021)
	Market Overreaction	Stock prices often surge irrationally during hype and then fall sharply	(Allen et al., 2022; Shiller, 2020)
	Volatility from Community Discussions	Discussions in stock groups make me feel that prices are highly volatile	(Giglio et al., 2020; Nurlaily et al., 2023)

Source: Research Data, 2025

The indicators for this variable include an increase in transaction frequency after engaging in discussions (C1), an increase in transaction value (C2), purchase decisions influenced by community discussions (C3), active involvement during trading hours in response to ongoing conversations (C4), and experiences of buying and selling stocks within the same day based on group information (C5). This variable represents the extent to which digital community activity can drive actual investment behavior.

Finally, stock price volatility (Y2) is understood as investors' perception of the instability of small-cap stock prices, which tends to be triggered by euphoria or panic originating from social media discussions. Five indicators are used to measure this variable: the perception that heavily discussed stocks tend to be more volatile (D1), price fluctuations caused by circulating news (D2), price declines following periods of euphoria (D3), signs of market overreaction to online narratives (D4), and sudden and unstable price changes driven by the dynamics of community discussions (D5). All these indicators consistently reflect how social psychological effects can influence price movements in a non-fundamental manner.

This study employs multiple linear regression analysis to examine the influence of two independent variables – investor activity on social media (X_1) and investor sentiment (X_2) – on two dependent variables, namely stock trading volume (Y_1) and stock price volatility (Y_2). Using this approach, each dependent variable is analyzed within a separate regression model. The structural model

representing the relationships among variables in this study can be formulated as follows:

$$Y_1 = \alpha_1 + \beta_1 X_1 + \beta_2 X_2 + \varepsilon_1 \dots \dots \dots (1)$$

$$Y_2 = \alpha_2 + \beta_3 X_1 + \beta_4 X_2 + \varepsilon_2 \dots \dots \dots (2)$$

Description:

Y_1 = Trading volume of small-cap stocks

Y_2 = Price volatility of small-cap stocks

X_1 = Investor activity on social media

X_2 = Sentimen investor

$\beta_1, \beta_2, \beta_3, \beta_4$ = Path coefficients

$\varepsilon_1, \varepsilon_2$ = Error term

This model was analyzed using a multiple linear regression approach with the assistance of SPSS software. This method allows for the simultaneous testing of relationships between multiple independent variables and a single dependent variable, and is particularly effective in studies with a moderate sample size. The analysis was used to examine the strength and direction of the influence of investor activity on social media and investor sentiment on two dependent variables: stock trading volume and the price volatility of small-cap stocks. The statistical validity of the model was assessed through several key indicators, including the adjusted R-squared (Adjusted R^2) value to measure the extent to which the independent variables explain variation in the dependent variables, and the significance values (p-values) from the F-test (simultaneous) and t-test (partial) to evaluate the validity of the proposed hypotheses. In addition, multicollinearity was tested using the Variance Inflation Factor (VIF) to ensure that there were no high correlations among predictors that could compromise the stability of the regression model.

RESULTS AND DISCUSSION

Before conducting the regression analysis, tests for validity and reliability of the research instrument were performed. Based on data collected from 200 respondents, all items showed a Pearson correlation coefficient (r-value) greater than 0.30 and a significance level (p-value) below 0.05. Therefore, all questionnaire items were deemed valid. This standard aligns with the guidelines of (Ghozali, 2016; Sugiyono, 2017), who state that an instrument item is considered valid if the r-value exceeds 0.30 and the significance level is below 5%. Additionally Hair et al. (2014) assert that a Cronbach's Alpha value of ≥ 0.70 indicates that an instrument is reliable. The validity test using Pearson correlation showed that all items under variables X_1 , X_2 , Y_1 , and Y_2 had r-values ranging from 0.487 to 0.812 with significance levels below 0.05, indicating strong validity. The reliability test using Cronbach's Alpha yielded values above 0.70 for all constructs: investor activity (0.842), investor sentiment (0.874), trading volume (0.813), and price volatility (0.829), confirming that all instruments had good internal consistency. Therefore, all questionnaire items met the requirements for valid and reliable measurement tools for further analysis.

Before conducting the regression analysis, tests of validity, reliability, and descriptive statistics were carried out on the research instrument. Validity was assessed using Pearson correlation between each item score and the total score of its corresponding construct, with results showing that all items had r-values

greater than 0.30 and significance levels (p-values) below 0.05. Thus, all items were considered valid, following the criteria proposed by Ghazali (2016) and Sugiyono (2017). Reliability testing using Cronbach's Alpha showed that all constructs had alpha values exceeding 0.70, meeting the minimum threshold set by Hair et al. (2014), indicating that the instrument demonstrated good internal consistency. In addition, descriptive statistics revealed that the mean values for each variable ranged from 3.77 to 4.12 on a 5-point Likert scale, with relatively moderate standard deviations. These results reflect investors' generally high, yet varied, perceptions regarding activity, sentiment, trading volume, and stock price volatility. Based on these findings, all instruments were deemed suitable for further analysis.

Table 5. Multiple Linear Regression Results 1: The Effect of Investor Activity and Sentiment on Trading Volume (Y_1)

Model	Unstandardized Coefficients (B)	t	Sig.
(Constant)	1.097	2.119	0.035
Investor Activity (X_1)	0.284	3.216	0.001
Investor Sentiment (X_2)	0.329	3.404	0.001
Adjusted R Square	0.601		
Sig. F	0.000		

Source: Research Data, 2025

The regression results indicate that both investor activity and investor sentiment significantly influence the trading volume of small-cap stocks. Investor activity on social media (X_1) has a coefficient of $B = 0.284$ with a p-value of 0.001, suggesting that greater engagement in online forums corresponds to a higher tendency to conduct stock transactions. Similarly, investor sentiment (X_2) shows a strong influence ($B = 0.329$; $p = 0.001$), indicating that exposure to positive social narratives drives an increase in trading volume. The model has an adjusted R-squared value of 0.601, meaning that 60.1% of the variation in trading volume can be explained by these two independent variables. These findings are consistent with the Theory of Planned Behavior (Ajzen, 1991) and research by (Caron et al., 2021) which suggest that digital social dynamics significantly affect retail investors' transaction decisions.

Table 6. Multiple Linear Regression Results 2: The Effect of Investor Activity and Sentiment on Price Volatility (Y_2)

Model	Unstandardized Coefficients (B)	t	Sig.
(Constant)	0.980	1.870	0.063
Investor Activity (X_1)	0.301	3.003	0.003
Investor Sentiment (X_2)	0.366	3.327	0.001
Adjusted R Square	0.618		
Sig. F	0.000		

Source: Research Data, 2025

The second model indicates that both investor activity (X_1) and investor sentiment (X_2) also influence perceptions of stock price volatility. Investor activity has a positive effect ($B = 0.301$; $p = 0.003$), suggesting that active participation in stock forums leads to fluctuating expectations and a tendency to perceive market fluctuations as high. Investor sentiment shows an even stronger influence ($B = 0.366$; $p = 0.001$), indicating that social emotions such as optimism or fear in response to market rumors contribute to perceptions of price instability. The

adjusted R-squared value of 0.618 implies that these two variables explain 61.8% of the variation in perceived price volatility. This finding supports (Shiller, 2020) argument that public narratives can drive volatility through collective psychological mechanisms.

The first model table presents the effect of investor activity on social media and investor sentiment on stock trading volume, while the second model table illustrates how these two variables are related to stock price volatility. The key findings from both models indicate that all independent variables have a positive relationship with the respective dependent variables, as reflected in the direction of the regression coefficients in each table. The first model shows an adjusted R-squared value of 0.601, while the second model yields a value of 0.618, indicating that both models explain more than half of the variation in the data.

The hypothesis testing results align with the initial assumptions that investor activity and sentiment influence stock market dynamics, as formulated in Hypotheses 1 through 4. The underlying theoretical framework is based on the Theory of Planned Behavior (Ajzen, 1991) and the concept of social informedness, where digital activity and collective perception within online social spaces influence investment decisions. Investor activity in digital forums serves as a form of social validation, reinforcing perceptions of market opportunities. Meanwhile, widespread investor sentiment—whether optimistic or pessimistic—exerts psychological pressure in the decision-making process.

The relationships among variables in this study can be logically explained based on the tabulated data. In the first model, the coefficients for investor activity and investor sentiment indicate a positive relationship with stock trading volume. This suggests that higher engagement and exposure to online discussions increase the likelihood of investors engaging in trading activities. In the second model, similar coefficients show that sentiment and activity are also related to investors' perceptions of price fluctuations. In other words, high levels of involvement in online forums make investors more sensitive and responsive to price changes, thereby reinforcing their perception of volatility.

Hypothesis 1 examines the effect of investor activity on social media on stock trading volume. The regression results in the first model show that investor activity has a significant positive effect on trading volume ($B = 0.277$; $p = 0.005$). This finding indicates that the more actively investors engage in digital stock forums—such as reading, sharing, or responding to discussions on platforms like Telegram and Stockbit—the more likely they are to conduct stock transactions. Such activity creates a social validation effect and enhances investors' confidence to act, aligning with the concept of subjective norms in the Theory of Planned Behavior. With an adjusted R-squared value of 0.601, the model explains 60.1% of the variation in stock trading volume, indicating that online activity is a significant factor in driving market transaction dynamics.

Hypothesis 2 tests the effect of investor sentiment on stock trading volume. The regression results also indicate a significant positive effect ($B = 0.354$; $p = 0.001$), suggesting that collective sentiment—whether optimism or fear arising from viral news and community narratives—drives stock buying or selling decisions. These social emotions create psychological pressure and heighten impulsive trading behavior. This finding aligns with the social informedness

approach, which posits that socially constructed perceptions of information can influence market behavior. Therefore, Hypothesis 2 is supported and reinforces the understanding of how community-driven emotions affect trading volume.

Hypothesis 3 tests the effect of investor activity on perceptions of stock price volatility. In the second model, investor activity demonstrates a significant positive effect ($B = 0.301$; $p = 0.003$), indicating that the more actively an investor participates in digital forums, the higher their perception of price instability. This is attributed to heightened expectations and increased sensitivity to information fluctuations on social media, which tend to lead to overinterpretation of price movements. Digital activity also fosters emotional responsiveness to market news, thereby reinforcing perceptions of volatility.

Hypothesis 4 examines the effect of investor sentiment on perceptions of stock price volatility. The results reveal the strongest influence among all independent variables ($B = 0.366$; $p = 0.001$), indicating that narratives, euphoria, and fear circulating on social media significantly shape perceptions of price instability. When investors are exposed to extreme comments or viral news, their perception of market fluctuations increases—even if such fluctuations are not necessarily supported by fundamental conditions. The adjusted R-squared value of 0.618 in the second model suggests that investor activity and sentiment together explain 61.8% of the variation in perceived stock price volatility.

When compared to previous research findings, the pattern observed in this study shows consistency. Caron et al. (2021) demonstrated that online communities influence market decisions, while Bollen et al. (2011) explained that the collective public mood captured through social media can predict financial market trends. In the Indonesian context, these findings align with the study by Dahar et al. (2024), which highlighted platforms such as Stockbit and Telegram as key drivers of information flow and retail trading behavior. Therefore, the findings of this study do not stand in isolation but rather reinforce the existing theoretical understanding of the role of social media and collective emotion in modern financial behavior. Moreover, this study provides new empirical evidence within the domestic market context, particularly regarding the dynamics of retail investors in the Bali region. It also expands the scope of the literature by highlighting the connection between digital behavior and risk perception in the capital market. Given the backdrop of rapid technological advancement, this contribution is especially relevant in shaping social media-based financial literacy strategies.

CONCLUSION

This study demonstrates that retail investor behavior in responding to the dynamics of small-cap stock markets can be explained through two main aspects: engagement in social media activity and sentiment shaped by online community discussions. Both factors contribute to shaping trading volume patterns and perceptions of price volatility. The findings support the understanding that investment decision-making is influenced not only by rational information but also by evolving social and psychological dynamics within digital spaces. Consequently, online communities play a crucial role in understanding the motivations and behavioral patterns of contemporary retail investors.

This study is limited by its geographical scope, which includes only respondents from the Bali region, as well as its use of a quantitative approach that does not deeply explore narrative and motivational aspects. Future research is recommended to adopt qualitative or mixed-methods approaches to gain deeper insights into the reasoning behind investor perceptions and behaviors. Additionally, expanding the study to include other urban areas in Indonesia would allow for broader generalizations about retail investor behavior in an increasingly digital social context.

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