

Social Media Followers Influence Banking Stock Prices in Indonesia

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ABSTRACT

Background. Progress in a country can be seen from the development of the capital market, because the capital market plays a very important role in transforming and advancing a country's economy so that it grows and develops. Indonesia is a country known to be rich in natural resources, so the development of capital markets in Indonesia is a step towards sustainable economic development.

Purpose. The purpose of this study is to determine the effect of social media on the economic, social and political sectors.

Method. The research used is quantitative research with descriptive and verification research methods.

Results. The result of this study is that the influence of the number of social media followers on the share price of banks in Indonesia shows a positive correlation between the two. In this context, banks need to utilise social media more effectively as a marketing tool, pay attention to reputation risk management, improve transparency and communication with investors, and strengthen the role of regulators in monitoring the impact of social media..

Conclusion. With this research, there is a finding that in the field of social media, there are variables that influence the financial sector, in this case, company finances, namely the number of followers of a social media platform will influence stock prices. This should be a concern for stakeholders in the business sector to pay attention to social media developments occurring in Indonesia.

KEYWORDS

Follower, Social Media, Stock Price

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INTRODUCTION

Progress in a country can be seen from the development of the capital market, because the capital market plays a very important role in transforming and advancing a country's economy so that it grows and develops (Clarke & Unsworth, 2020; Rodriguez & Storer, 2020). Indonesia is a country known to be rich in natural resources, so the development of capital markets in Indonesia is a step towards sustainable economic development (Lamb dkk., 2020). Basically, a business can develop if the capital owned by the company is large and has large investment costs. Elliyana (2020: 40) states that the capital market is a market for many long-term financial instruments that can be transacted, including debt securities (bonds), shares,



mutual funds, derivatives and others (Kurniawan dkk., 2021; Li dkk., 2021).

The capital market provides investment opportunities for foreign and domestic investors to record significant performance improvements. One of the most popular capital/financial market instruments is shares, because shares have the potential to provide attractive returns. Shares are ownership of securities of an issuer with the aim of gaining long-term profits (Jang & Lee, 2019). An issuer can be said to be good and healthy by measuring capital market performance, such as share price growth, market capitalization, trading volume, trading value, trading frequency and other financial factors (Asongu & Odhiambo, 2019; Högberg, 2021).

The ratio in determining whether an issuer's performance is good or not is based on liquidity ratios, profitability ratios, solvency ratios and other financial ratios. Investors invest their money by buying shares in companies listed on the Indonesia Stock Exchange (BEI) to get a return or income on their investment (Ugwuozor & Ngwoke, 2021).

Share prices according to Bringham & Weston (2014) are the market value of securities obtained by investors when transacting by buying or selling shares which is determined by the closing price on the stock exchange on the available exchange so that the latest closing price is at the end of the share trading year (Meyers dkk., 2020). According to Chasana et al (2020) The share price is also a factor that must be considered and is important for investors when investing in an issuer because the share price is a reflection of the issuer's performance or achievements. According to Hartono (2008) the profits obtained by investors from this ownership come from the distribution of company income or dividends and from share price fluctuations (Frizzo-Barker dkk., 2020). According to Budiman (2007), share price fluctuations are influenced by 2 factors, internal factors and also external factors. Market prices are influenced by external factors, for example government policy requirements, inflation, the economy, political conditions, etc. Meanwhile, share prices are influenced by internal factors, namely company decisions, internal company policies and company performance (Mavromihales dkk., 2019; Pande dkk., 2021).

The banking sector has a vital function to collect funds for the community. Banks in Indonesia have four types of banks operating in Indonesia, namely private banks, government banks, foreign banks and sharia banks. Banks have a very important role for society because banking companies deal with money which is a sensitive topic for public discussion (Lakshmanan dkk., 2020; Vázquez-Herrero dkk., 2022).

On the other hand, companies cannot control external factors because this is something that is outside the company's control. However, companies have the ability to control internal factors so that share prices do not experience depreciation (Kuramochi dkk., 2020). To see the performance of share prices, investors can look at the closing price. The closing share price can be used as a comparison for the previous day, month or year. The price at the closing price is the price that will be recorded in the historical annual report which will be a benchmark for investors to see the movement of the issuer's share price per year (Andriamihaja dkk., 2019; Wahid dkk., 2023).

Currently, the share prices of companies owned by companies that have gone public in Indonesia are moving very dynamically. The dynamics of share prices are of course influenced by market mechanisms in the form of buying and selling on the stock market. What is interesting is that investors' decisions to sell or buy are influenced by various factors, including the investor's own sentiment (Chen dkk., 2020). To be able to extract sentiment from these social networks we have to carry out opinion mining on large amounts of data which is a difficult task, because texts on social networks are usually short, full of idioms, have unusual grammatical structures and many other problems (Bonfanti dkk., 2023). Furthermore, the literature in this context shows conflicting results

in predicting the market. Although some researchers have recently suggested weak to strong predictive power (Shoukat & Ramkissoon, 2022), previous researchers concluded that mood information on social media has no predictive power (Ji dkk., 2022). However, the use of comments on social networks to predict stock prices remains challenging.

Social media currently developing in Indonesia consists of several platforms including YouTube, Twitter, Metaverse, and Instagram. All of these social media platforms have a very large number of followers (Sovacool dkk., 2020). With a very large number of followers, this social media platform has become a space for companies to develop their market (Gao dkk., 2020). It can be seen that currently every company must have an account on this social media. This is done by companies to use social media as a tool to communicate with stakeholders and also use social media platforms as a marketing tool in their business (Kunnen, 2022; Lamb dkk., 2020).

Companies in the banking sector are no exception. And the same goes for banking companies that are members of the State Bank Association (Himbara). Every bank in Himbara, namely Bank Mandiri, BNI, BRI, and BTN has a social media platform account on YouTube, Twitter, Instagram, and Facebook, as can be seen below:

Table 1. Bank and Social Media

No.	Bank	Youtube	Grade	Twitter	Grade	Instagram	Grade	Facebook	Grade
1.	PT. Mandiri (Persero) atau Bank Mandiri	@OfficialBank Mandiri	B+	@bankmandiri	B-	@bankmandiri	B	Bank Mandiri	B
2.	PT. Negara Indonesia (Persero) atau (BNI)	@bni1946	B	@BNI	B+	@bni46	B	@BNI	B
3.	PT. Bank Rakyat Indonesia (Persero) atau (BRI)	BANK BRI	B	@BANKBRI_ID	C	@bank_bri	B	BANK BRI	B
4.	PT. Tabungan Negara (Persero) Tbk. atau (BTN)	@bankbtnofficial	C+	@bankbtn	B-	@bankbtn	B-	Bank BTN	C+

Source: www.socialblade.com

From the data above and related to the dynamics of share prices of banks included in Himbara Bank, an idea arises regarding the possibility that the share prices of these banks are influenced by the large or small number of followers or followers who follow the bank's social media. This could happen because investors can use social media as a tool in every decision making regarding shares (Huang & Wang, 2022; O'Rourke Scott, 2022).

With the availability of a huge flow of information and data at a very fast pace in this era of technology and digitalization, when positive news occurs at a bank that has an account on social media or what is often called viral, it can be ascertained the behavior carried out by the bank. The followers or followers of social media will be positive, and it is possible that the number of followers will increase. The opposite will happen when the owner of the account on social media is exposed to negative news or negative viral news, then it is possible that followers of the social media account will decrease, so that negative sentiment will affect the account owner.

RESEARCH METHODOLOGY

The research used is quantitative research with descriptive and verification research methods (Hamilton & Finley, 2019). Quantitative research is research on data in numerical form and statistical analysis. Descriptive research is research carried out to take independent variables, from one variable to another (Sundler dkk., 2019). Verification research is research that aims to check the truth of the results of research that has been carried out previously. There are several statistical tests that must be carried out to ensure the reliability and validity of research results. Here are some recommended statistical tests:

Regression Coefficient Significance Test: This test aims to evaluate whether there is a significant relationship between the independent variable (number of social media followers) and the dependent variable (bank share price). The statistical test that is commonly used is the t test, which involves calculating the t-score and p-value. If the p-value is less than the specified significance level (usually 0.05), then we can conclude that there is a significant relationship between the independent variable and the dependent variable.

Model Significance Test (F-Test): This test is used to determine whether the overall regression model has statistical significance. This test involves calculating the F statistic and p-value. If the p-value is less than the specified significance level, then we can conclude that the regression model as a whole has statistical significance.

Multicollinearity Test: This test is used to evaluate whether there is a multicollinearity problem between the independent variables. Multicollinearity occurs when there is high correlation between independent variables, which can cause problems in the interpretation of regression results. Some tests commonly used to test multicollinearity are Variance Inflation Factor (VIF) and Condition Index (CI). If the VIF or CI value exceeds a predetermined threshold value, then there is an indication of a multicollinearity problem.

Heteroscedasticity Test: This test is used to evaluate whether there is a heteroscedasticity problem in the regression model. Heteroscedasticity occurs when the residual variability is not constant over the range of values of the independent variable. The test commonly used to test heteroscedasticity is the Breusch-Pagan test or White test. If the p-value of this test is less than the specified significance level, then there is an indication of a heteroscedasticity problem.

Autocorrelation Test: This test is used to evaluate whether there is an autocorrelation problem in the regression model. Autocorrelation occurs when there is a correlation between the residuals in the regression model. The test commonly used to test autocorrelation is the Durbin-Watson test. If the Durbin-Watson value is outside the expected value range, then there is an indication of an autocorrelation problem.

RESULT AND DISCUSSION

The research sample consists of 260 which consist of daily share prices of banks that are members of Himbara including Bank Mandiri, Bank BNI, Bank BRI, and Bank BTN for 13 working days in June 2023. The results of this research show the number of followers on media platforms social media owned by banks that are members of Himbara Banks, namely Bank BNI, Bank BRI, Bank Mandiri and Bank BTN, have an influence on the price of the shares they sell on the Indonesian Stock Exchange. The results of this research support [Mohd_Akib_dkk_\(2023\)](#) assumption that results in research regarding bank social media followers will influence the bank's share price (Badalpur & Nurbakhsh, 2021). This research also confirms the research results of

Althuwaini (2022) and Al-Kandari dkk (2019) which show that investors have the characteristics of greed, fear and panic, so that these investor characteristics explain the behavior of individuals who tend to move or act according to with what the majority do (Asmara & Abubakar, 2019). This research also provides additional evidence for the research results of Francesconi dkk (2021), who strongly suspect that investors in Indonesia tend to be found as followers (Yaseen dkk., 2019). The first test was carried out to see which sectors had the highest and lowest investor follower behavior, by conducting descriptive statistical tests on the three sample sectors tested. The results of descriptive statistical tests are shown in Table 2.

Table 2. Descriptive Statistical Test of the Number of Himbara Bank Social Media Followers

Nama Platfotm	N	Mean	Standar Deviation
Harga Saham	52	5263,1	2785,41
X (Twitter)	52	426079,4	483749,4
Instagram (Ig)	52	792127,9	390768,2
Youtube	52	35678718,2	42382670,9
Facebook	52	356247,4	254701,4

Source: author's processing results

Testing the feasibility of the model uses the classic assumption test, which includes the data normality test, heteroscedasticity test, and autocorrelation test. The results of classical assumption testing are shown in Table 3 below:

Table 3. Classic Assumption Measurement

No	Name of Classic Assumption Test	Result	Decision
1	Normality Test	Asymp. Sig (1-tailed)	Fulfilled
2	Heteroscedasticity Test	Sig PFI	Fulfilled
3	Autocorrelation Test	Lag2	Fulfilled

Source: author's processing results

The data normality test was carried out to determine whether the data used in the research was normally distributed or not. Data normality testing was carried out using Kolmogorov Smirnov with a level of significance of 0.05. If Asymp. Sig. (2-tailed) > significant level ($\alpha = 0.05$) then the data is said to be normally distributed. Based on Table 1, it can be seen that the significant value with the Kolmogorof-Smirnov test is $0.254 > 0.05$, so it can be concluded that the regression model in this study is normally distributed.

Heteroscedasticity testing was carried out using the Glejser statistical test. The regression model does not contain heteroscedasticity if the significance value of the independent variable on the absolute value of the statistical residual is greater than 0.05. Based on Table 1, it can be seen that the independent variable in this study, namely PFI, has a significance value of $0.448 > 0.05$, so it can be said that heteroscedasticity does not occur in the regression model used.

The autocorrelation test is carried out to determine whether there are confounding errors between variables in a certain period and variables in the previous period. To detect the presence of autocorrelation data, the Langrange Multiplier test (LM test) was used, because the sample used in the study was relatively large, namely 260 observations. Autocorrelation detection is seen from the resulting Lag2 (res_2) value. If the Lag2 (res_2) value is greater than alpha ($\alpha = 0.05$) then the test model is free from autocorrelation. Based on Table 1, it is known that the Lag2 (res_2) value is $0.213 > 0.05$, so it can be said that there is no autocorrelation, so the regression model created is suitable for use for further analysis.

Hypothesis 1 testing was carried out using a multiple regression model, namely to test the effect of the number of followers on banking share prices in Indonesia. The results of multiple regression can be seen in Table 4.

Table 4. Multiple Regression Test

	Variabel	B	Std Error	t	sig
1	(Constant)	1580,475	34,404	45,938	0.000
	Instagram	,319	0,007	45,655	0.000
	Twitter (X)	,238	0,006	40,670	0.000
	Youtube	-,024	0,002	-12,135	0.000
	Facebook	,132	0,002	61,844	0.000

Source: author's processing results

Based on Table 4, the multiple regression equation is obtained as written below:

$$Y = 1580.5 + 0.319X_1 + 0.238X_2 - 0.024X_3 + 0.132X_4$$

From the equation obtained based on Table 2 above, it can be concluded that the multiple regression test produces a positive constant of 1580.5 which can be interpreted as if all independent variables have a value of 0 (Zero) then the total share price still has a value of 1580.5 unit.

The IG variable has a positive constant of 0.319, then the Twitter variable (X) has a positive constant as does the Facebook variable of 0.132. Meanwhile, the YouTube variable has a negative constant of -0.024. This can be interpreted as an increase in the number of followers on the IG, Twitter (X) and Facebook social media platforms that are owned will cause an increase in the price value of banking companies that are members of Himbara. However, the opposite is true for the YouTube platform, which has a negative constant, which means that the increase in the number of followers on the social media platform causes a decrease in share prices. Hypothesis testing in this research was carried out to determine the significance of the hypothesis that has been formulated. Hypothesis testing is divided into two, namely partial hypothesis testing (t test) and simultaneous hypothesis testing (F test).

The t test was carried out to determine the partial influence of the independent variable on the dependent variable, whether it had a significant effect or not. To determine the t value, it is necessary to have degrees of freedom in the numerator and degrees of freedom in the denominator using the following formula:

Error rate (n) = 5% and degrees of freedom (df) = $n - k - 1$

n = number of samples, n = 260

k = number of variables used, k = 2

then degrees of freedom (df) = $n-k-1 = 260-2-1 = 257$. The t test carried out is a two-way test, so the t table used is 1.284

Based on the table above it can be seen that:

The Instragram Follower variable, (X1) shows the significance value is $0.000 < 0.05$ and the statistical results of the t test show that the calculated t value = 45.938 is greater than the t table of 1.284, so it can be concluded that the hypothesis H 0 is rejected and H 1 is accepted which means For the Instagram follower variable (X1), there is a partial influence on share price (Y).

The Twitter Follower variable (X2) shows the significance value is $0.000 < 0.05$ and the statistical results of the t test show that the calculated t value = 40.670 is greater than the t table of 1.284, so it can be concluded that the hypothesis H 0 is rejected and H 2 is accepted which means for the variable Twitter followers (X2) partially have an influence on stock prices (Y).

The Youtube Follower variable (X3) shows a significance value of $0.000 < 0.05$ and the statistical results of the t test show that the calculated t value = -12.135 is smaller than the t table of 1.284, so it can be concluded that the hypothesis H0 is accepted which means for the Youtube Follower variable (X3) partially there is no influence on share prices (Y).

The Facebook Follower variable (X4) shows a significance value of $0.000 < 0.05$ and the statistical results of the t test show that the calculated t value = 61.844 is greater than the t table of 1.284, so it can be concluded that the hypothesis H 0 is rejected and H 2 is accepted which means for the variable Facebook (X4) partially has an influence on share prices (Y).

CONCLUSION

Research on the influence of the number of social media followers on bank share prices in Indonesia reveals a positive correlation between the two. In this context, banks need to utilize social media more effectively as a marketing tool, pay attention to reputation risk management, increase transparency and communication with investors, and strengthen the role of regulators in monitoring the impact of social media. It is hoped that this advice can help banks in Indonesia optimize the use of social media and face the challenges that arise from interactions with these platforms.

Take advantage of social media as an effective marketing tool: Banks in Indonesia should make more optimal use of social media as an effective marketing tool. By increasing activity on social media and gaining a larger following, banks can increase their exposure and positive image in the eyes of investors.

Pay attention to reputation risk management: Banks must be more careful in managing reputation risks that can arise from social media. Negative comments or fake news spread on social media can affect share prices and bank image. Therefore, banks need to have a team responsible for monitoring and responding quickly to any content related to them on social media.

Increase transparency and communication with investors: This research shows that investors pay attention to bank activity on social media. Therefore, banks need to increase transparency and communication with investors via social media. Banks can provide the latest information about financial performance, business projections and social activities carried out through social media platforms. Strengthen the role of regulators in monitoring the impact of social media: Financial regulators in Indonesia need to strengthen their role in monitoring the impact of social media on bank share prices. They can develop guidelines or regulations governing banks' use of social media and ensure that banks adhere to sound and ethical principles in interacting with social media followers.

AUTHORS' CONTRIBUTION

Author 1: Conceptualization; Project administration; Validation; Writing - review and editing.

Author 2: Conceptualization; Data curation; In-vestigation.

Author 3: Data curation; Investigation.

Author 4: Formal analysis; Methodology; Writing - original draft.

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