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The Influence of Operating Cash Flow Opacity, Institutional Ownership, and Audit Quality on Stock Price Crash in Non-Financial Companies Listed on the Indonesian Stock Exchange

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A B S T R A C T

This research aims to examine the influence of operating cash flow opacity, institutional ownership, and audit quality on stock price crashes. The population for this study consists of non-financial companies listed on the Indonesia Stock Exchange that experienced a stock price crash in 2020. The sample consisted of 178 companies selected using simple random sampling techniques. The data used in this research is secondary data obtained from the company's annual report and the stock price list on the Indonesia Stock Exchange and analysed using the regression analysis method. Empirical results show that operating cash flow opacity and institutional ownership are positively related to stock price crashes, while audit quality has a negative effect on stock price crashes.

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INTRODUCTION

Shareholders (investors) need some important information about a company when making an investment. This information helps investors predict how successful the company will be in purchasing the stock and the best profits that will be achieved. The information that shareholders need can be obtained by evaluating the company's financial reports (Setiawan & Hijriyani, 2017).

However, company information can be obtained not only from financial reports but also from stock prices. Basically, investors only focus on company performance and do not observe the trend of stock price crash. This occurs because management attempts to postpone the release of negative information (Habib & Hasan, 2017). Higgins, Omer, and Phillips (2015) indicated that a key strategy for companies to maintain stable operations is to postpone the release of negative news to some extent. Managers hide negative information about the company's performance to achieve short-term gains. As a result, when the bad news is eventually disclosed, the stock price undergoes a significant drop (crash).

A stock price crash is an event where the stock price drops significantly in a relatively short period of time, and of course such an event can be detrimental to shareholders. As such, this event has attracted the attention of regulators, academics, and shareholders themselves (Yeung & Lento, 2018). PT Adhi Karya Tbk (ADHI) was among the companies that saw a significant drop in stock price a few days after the first Covid-19 case was reported in Indonesia. The share price fell by more than half, from IDR 1,210 on December 30, 2019, to IDR 362 on March 24, 2020. PT Semen Indonesia Tbk (SMGR) is one of the listed BUMNs whose share price has fallen sharply during the pandemic. As of the close of trading on December 30, 2019, the cement producer's share price was IDR 12,225 per share. Comparing the share price at the last close of trading on March 20, 2020, it fell to IDR 5,475 per share. The COVID-19 pandemic outbreak had a severe impact on the company's performance, causing SMGR's stock price to experience SPC just days after the first case (www.idx.go.id, 2020).

Not only global economic problems are the reason for the decline in corporate stock prices, stock price crash can also be caused by a decline in corporate performance. One case in Indonesia involved the national gas company. In the third quarter of 2006, management learned that the company's performance was not as expected (bad news), but this news was not reported in the quarterly report. Very bad consequences occurred, and within one day of the release of this news in early 2007, PGN's stock price fell by 23.36% (Prastiwi & Hardiyanti, 2020).

Another case was the Indonesian company Garuda, which concealed losses by reporting accounts receivable as revenue in its 2018 financial report, which led to its collapse in April 2019 (Bwarleling, 2020).

The most recent case involved shares of PT Waskita Karya, which have been falling since March 2021. It was revealed that PT Waskita Karya engaged in operating cash flow opacity in the form of reporting supplier payments before they were actually received, and announced nine toll road projects that the

company admitted would not be implemented until 2021 (Cheng et al., 2020; Sidik, 2021).

Various studies and research have explored the reasons behind stock price crashes. A commonly discussed factor in accounting literature is the withholding of negative information. As a company's performance deteriorates, managers postpone revealing bad news, leading to a sharp decline in the stock price when the information is eventually disclosed (Chang et al., 2017).

Barth et al. (2017) recently demonstrated that the relationship between cash flow values and stock price fluctuations has grown stronger over time. Because operating cash flows are crucial to market participants, managers often obscure their reporting. This opacity means that investors cannot clearly view operating cash flows, as managers manipulate the reported figures to conceal negative news (Cheng et al., 2020; Jin & Myers, 2006).

According to the principal-agent theory, the likelihood of withholding negative information stems from the information gap between management and shareholders. Utari & Sari (2017) show that information asymmetry occurs because shareholders lack the resources needed to effectively oversee management and ensure they act in shareholders' best interests. Since shareholders have limited monitoring activities, management tries to hide bad news about the company to give the outside world the impression that management is doing a good job and acting in the interests of shareholders, thereby avoiding a crash.

If monitoring by loyal investors reduces the accumulation of bad news, we would expect a negative correlation between loyal holdings and stock price declines. On the other hand, there could be a positive correlation between institutional holdings and stock price crashes, as institutional investors, due to their limited ownership and weaker monitoring, may facilitate the accumulation of bad news. Essentially, while stock price crashes harm investor wealth and confidence, the presence of multiple institutions and the competition for information among them in short-term investments can increase the likelihood of such crashes (Fan & Fu, 2019; Ghadim & Fard, 2021). However, Wen et al. (2020), found different results. Therefore, institutional ownership has no influence on stock price crash.

Defond & Zhang (2014) argue that high audit quality can enhance the reliability of financial reports, allowing investors to trust the company more and maintain or even increase investment, thereby keeping stock prices stable or even rising. High audit quality can reduce aggressive earnings management activities. A stronger ownership structure and higher audit quality lead to a reduced likelihood of stock price crashes. Audit quality is inversely related to stock price crash risk, suggesting that companies audited by Big4 firms lower this risk by decreasing information asymmetry (Chae et al., 2020; Chae & Hwang, 2017; Yeung & Lento, 2018). At the same time, the results of Khajavi & Zare (2016) showed different results, that is, audit quality does not impact the likelihood of a stock price crash.

There are few studies on the consequences of operating cash flow opacity. However, there are many examples of operating cash flow opacity in

stock price crash, such as the cases of Perusahaan Gas Negara in 2006, Garuda Indonesia in 2019, and Waskita Karya in 2021. Therefore, to address this gap in the literature, we examine the impact of cash flow (working capital) opacity on the risk of stock price crashes in specific companies. There remains a research gap concerning the effects of institutional ownership and audit quality, so this study aims to assess the consistency and relevance of previous findings.

The distinction of this study from previous research is that it was conducted on the Indonesian Stock Exchange in 2020, a year when the global economy experienced a recession due to the epidemic, which was the main factor for the deterioration of the socio-economic situation and the main reason for the deterioration of the economic situation in many countries and regions. The company experienced a crash.

THEORETICAL REVIEW

Agency Theory

Jensen & Meckling (1976) explained that managers of a company are "agents" and shareholders are "principals". Shareholders, as principals, delegate decision-making power to managers who are representatives or agents of shareholders. The problem with the corporate ownership system is that agents do not always make decisions in the best interests of the principals. Conflict can arise due to the disparity between the goals of the principal and the agent, as posited by agency theory. Company managers, driven by personal objectives, often prioritize projects and corporate investments that yield immediate high profits, rather than prioritizing long-term profitability and maximizing shareholder welfare.

Shareholders have direct opportunities to monitor corporate management to help resolve agency conflicts. First, shareholders have the right to influence the company's operations through voting at shareholder meetings. Second, shareholders' voting rights are an important part of their financial assets, and shareholders will collectively lobby managers (on behalf of the company) to solve problems they don't like. Shareholders can also choose to divest (sell shares). Divestment refers to a company's failure to retain investors, and divestment is caused by shareholders' dissatisfaction with the activities of managers (Warsono et al., 2009).

Bad News Hoarding Theory

The theory of hoarding bad news is founded on the idea that managers have strategic motives to hide and accumulate negative information within their organizations. Extensive research conducted by Jin & Myers (2006) consistently supports the notion that agency problems drive managers to adopt strategies that limit the disclosure of unfavorable news to the public. Additionally, their findings reveal that financial motivations significantly contribute to the accumulation of bad news within companies. However, Ball (2009) research demonstrates that non-financial motives, particularly the desire to uphold company performance, are even more influential in prompting managers to conceal negative information. Collectively, the studies conducted by Ball (2009) and Jin & Myers (2006) highlight the significant role played by

both financial and non-financial incentives in enabling the persistence of bad news within organizations.

Crashes in the stock market occur when a company's stock price undergoes a significant and abnormal decrease, indicating the presence of a stock price crash. The primary cause of these crashes is attributed to managers' deceptive actions to hide negative corporate information. This behavior is widely acknowledged as the primary trigger for stock market crashes. According to the theory of hoarding bad news during stock price crashes, opaque corporate managers tend to hide negative information and accumulate it over time until it becomes too costly or impossible to disclose all at once at a critical moment. As a result, the company continues to conceal bad news (Kothari et al., 2009). When the critical point is reached, all the accumulated bad news is released simultaneously, leading to a sudden drop in stock prices.

In line with the bad news hoarding theory, Chang et al. (2017) identified three factors that influence crash risk: the probability of bad news occurring (i.e., the likelihood of negative developments due to poor management or unexpected issues), the rate at which management accumulates bad news (i.e., the tendency for management to withhold bad news, how often such news occurs, and whether it is discarded or concealed), and the intensity of the market's reaction when the bad news is eventually disclosed. Current empirical research mainly focuses on how the probability of bad news and management's handling of it affect crash risk (Deng et al., 2018).

Operating Cash Flow Opacity on Stock Price Crash

Operating cash flow opacity refers to the insufficient information that prevents investors from clearly observing operating cash flows and earnings to assess the firm's value. This lack of information stems from management's management of operating cash flow financial reporting (Barth et al., 2017; Cheng et al., 2020). In their study, Cheng et al. (2020) categorizes the opacity of operating cash flow management into two distinct types. The first type solely impacts the operating cash flow without altering the earnings. This can be achieved by delaying or expediting payments to suppliers or customers, respectively, effectively manipulating the timing of cash flows. Additionally, companies can manipulate reported operating cash flows by transferring items between different cash flow categories. The second type of management tactics, however, has a direct effect on both operating cash flow and earnings.

Companies are motivated to manipulate operating cash flow in order to present a more favorable image to investors, thus increasing the opaqueness of operating cash flow, which is vital for investors. Lee (2012) offers numerous instances of companies engaging in tactics to manipulate reported operating cash flows. For instance, Dynegy employs special purpose entities to disguise loans as operating cash flow, resulting in a $300 million boost to its operating cash flow (although this does not impact earnings due to non-cash losses). Additionally, there are multiple cases of cash flow restatements that reveal companies shifting the classification of cash flows between financing, investing, and operational activities. Lee (2012) also provides extensive

evidence, based on a large sample, demonstrating that firms manipulate operating cash flow when they face financial distress, have credit ratings close to the investment/non-investment threshold, receive cash flow estimates from analysts, or experience high stock returns.

In order to capture real earnings management, recent studies have shifted their focus away from using abnormal operating cash flows. This is due to the fact that different real earnings management activities can have mixed implications on operating cash flows. In other words, the manipulation of real activities can impact abnormal operating cash flow in both positive and negative ways, resulting in an unclear overall effect (Zang, 2012). Instead, abnormal operating cash flow is now used to identify operating cash flow reporting management and subsequently measure operating cash flow opacity based on operating cash flow management.

Cheng et al. (2020) construct operating cash flow opacity as a proxy for operating cash flow management. The operating cash flow opacity indicator is associated with a higher probability of operating cash flow adjustments (upward or downward).

Opaqueness of operating cash flows can influence stock price crashes by encouraging the accumulation of bad news by management and the misallocation of resources. As a crucial source of company-specific information, operating cash flows provide market participants with information about the company's performance. When cash flows are unclear, it becomes challenging for market participants to accurately assess a company's actual performance. This creates an opportunity for managers to conceal negative information. If bad news continues to accumulate and is suddenly revealed, it can lead to stock price crash. Moreover, the lack of transparency in operating cash flows allows insiders to have insider knowledge about a company's resources, especially its operating cash flow, which can protect their mining activities. The sudden disclosure of significant resource diversions can also result in a sharp decline in stock prices (Cheng et al., 2020). Based on Cheng et al. (2020) analysis, the opacity of operating cash flows contributes to the accumulation of negative news and resource diversion over time, thereby increasing the risk of future incidents.

H_1: Operating cash flow opacity has an effect on stock price crash.

Institutional Ownership on Stock Price Crash

Institutional ownership, as defined by Tarjo (2021: 48), refers to the percentage of shares owned by institutional investors. This measure serves as a means to mitigate conflicts of interest. To calculate institutional ownership, one must compare the share ownership of institutions (such as government entities, foreign companies, and financial institutions) in a given company to the total number of shares in circulation.

Based on Fan & Fu (2019) findings, it is evident that there is a direct relationship between institutional ownership and the likelihood of future stock price crash risk. In situations where negative news about a company is uncovered, unrelated institutional investors tend to engage in aggressive

selling of their shares. This, in turn, amplifies the market's reaction to the bad news and further elevates the risk of a stock price crash. It is worth noting that the strength of the relationship between institutional ownership and stock price crash is particularly evident in stocks that face a higher level of competition among institutional investors.

In a study conducted by researcher Kempf (2017), the attention levels of institutional investors were measured by analyzing external events that attract attention. The findings reveal that CEOs tend to take actions that negatively impact the value of their company's stock when there is a high level of interference from institutional shareholders. Another study carried out by Ward et al. (2018) demonstrates that the attention given by institutions to a particular company decreases as the weight of that company in their portfolio increases. This reduction in monitoring is associated with a decline in the marginal value of a firm's cash holdings.

Institutional ownership, as defined by Pohan (2015), refers to the proportion of shares held by institutions and blockholders. Increased institutional ownership is expected to enhance control. The importance of institutional ownership lies in its capacity to alleviate conflicts of interest between managers and shareholders. Institutional investors act as a robust monitoring mechanism, ensuring that managerial decisions are less likely to lead to stock price crashes.

Research by Akins et al. (2012) suggests that competition among institutional investors fosters a more aggressive trading strategy, ultimately leading to a higher likelihood of these institutions divesting their ownership when negative news about a company is disclosed. This phenomenon, known as the bad news hold (bad news hoarding theory), subsequently results in a stock price crash.

H_2: Institutional ownership effect on stock price crash

Audit Quality on Stock Price Crash

Chae et al. (2020) tested the impact of audit quality on accident risk using the Big 4 accounting firms (a proxy for audit quality) as indicators of good corporate governance. The study found that audit quality is negatively correlated with the likelihood of a stock price crash.This means that companies audited by Big4 auditors can lower crash risk by decreasing information asymmetry.

The ability of an auditor to maintain audit quality relies on their independence, competence, and adherence to a code of ethics. When performing audit responsibilities, it is crucial for auditors to possess both independence and competence (Yadiati & Mubarok, 2017; 113). The measurement of auditor quality can be determined by categorizing audits conducted by globally recognized accounting firms, such as the Big Four, Big Six, and Big Eight, which are included in international rankings (Andreou et al., 2017).

In a study conducted by Yeung & Lento (2018), the impact of audit quality on stock price crashes was examined. The results showed that

companies employing high-quality accounting firm are more inclined to refrain from concealing negative information, resulting in a potential reduction in stock price crash. Withholding unfavorable news can undermine investor confidence, potentially leading to stock price crash. Conversely, the direct disclosure of negative news enables investors to make informed decisions and gives managers the opportunity to take necessary actions to rectify the situation.

H_3: audit quality effect on stock price crash

The conceptual framework of this study is shown in Figure 1.

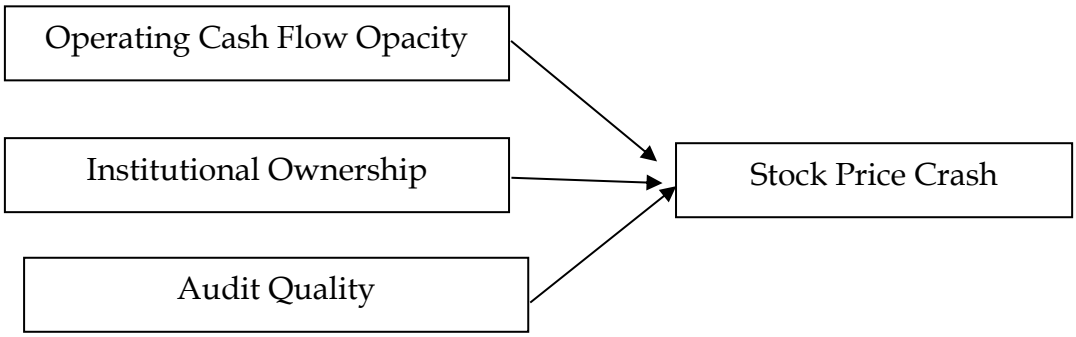

Figure 1. Conceptual Framework

METHODOLOGY

The design of research is essentially a scheme that directs researchers towards a specific goal and serves as a principle or guide for all research procedures (Sekaran & Bougie, 2017: 279). This study seeks to examine the effects of operating cash flow opacity, institutional ownership, and audit quality on stock price crashes in non-financial companies listed on the Indonesia Stock Exchange. In line with the research objectives, the study utilizes hypothesis testing methodology. This research is classified as causal because it aims to identify the causes of the problem to offer a solution. In this regard, the independent variable is said to cause the dependent variable, that is, operating cash flow opacity, institutional ownership, and the quality of audits influence stock price crash.

The researcher's involvement in this study was kept to a minimum, as there was no manipulation or interference with the data to sway the outcomes. The data collection process solely relied on financial reports from companies, serving as a means to examine the impact of independent variables on the dependent variable. The research was carried out in an unregulated environment, utilizing non-financial companies listed on the Indonesia Stock Exchange as the unit of analysis. The observation period for this study spanned the year 2020. It's important to note that the time horizon adopted in this research was cross-sectional, meaning that data was collected from multiple companies within the same timeframe, in order to address the research inquiries.

This study focused on 320 non-financial companies listed on the Indonesia Stock Exchange that experienced a substantial drop in stock prices in

2020. To ensure a representative sample, random sampling was employed. This method involves selecting samples without considering the different segments within the population. The minimum sample size of 178 companies was determined using the Slovin calculation formula, as per the requirements of this study.

In this study, the stock price crash is considered a dependent variable, which is a variable that is affected by other variables. Stock price crash is calculated using a modified market model that takes into account previous studies (Andreou et al., 2017; Callen & Fang, 2015). In order to measure this model, the first step is to determine which weekly returns are affected by specific information regarding company behavior, this is accomplished by looking for residuals from the regression between individual company's weekly returns and market returns. With the regression model employed as follows:

$$r_{j,t} = \alpha_j + \beta_{1,j} r_{m,t-2} + \beta_{2,j} r_{m,t-1} + \beta_{3,j} r_{m,t} + \beta_{4,j} r_{m,t+1} + \beta_{5,j} r_{m,t+2} + \varepsilon_{j,t}$$

where $r_{j,t}$ is the return of firm j in week t, and $r_{m,t}$ is the IDX Composite value-weighted market return in week t. To anticipate unsynchronized transactions, the returns of the stock market at t-2 and t-1, as well as the returns at t+1 and t+2, are incorporated into the model. After obtaining the regression residual ($\varepsilon_{j,t}$) from the aforementioned market model, the residual is expanded by adding 1 and then transformed into natural logarithm using the formula ($w_{j,t} = \ln(1 + \varepsilon_{j,t})$). This natural logarithm serves as the key in searching for the value of stock price crash. The specific return of this company is transformed into natural logarithm to reduce the tendency of return distribution towards the positive direction and to maintain a symmetric distribution (Habib & Hasan, 2017).

In line with Chen et al. (2001), we calculate NCSKEW by taking the negative of the third moment of firm-specific weekly residual returns for a fiscal year and dividing it by the standard deviation of these residual returns raised to the third power. Specifically, for each firm j in year t , we determine NCSKEW using the following formula:

$$NCSKEW = - [n(n-1)^{3/2} \sum w^3_{it}] / [(n-1)(n-2) (\sum w_{it}^2)^{3/2}]$$

We derive the operating cash flow opacity from the abnormal OCF (a metric for OCF management) which is estimated using a model created by Dechow et al. (1998) and implemented by Lee (2012).

$$OCF_t/TA_{t-1} = \lambda_0 + \lambda_1(1/TA_{t-1}) + \lambda_2(SALE_t/TA_{t-1}) + \lambda_3(\Delta SALE_t/TA_{t-1}) + \varepsilon$$

In the case that OCF is the operating cash flow for period t, TA stands for the total assets during period t-1 while SALE represents sales that occurred during period t and ΔSALE denotes change in sales during period t. We use parameter estimates from Eq. to compute abnormal operating cash flow

(AOCF) which is an alternative value of normal operating cash flow by itself (i.e., without using direct observation). To find operating cash flow opacity, we sum the absolute value of abnormal cash flow over the previous three years; operating cash flow opacity can then be inferred from this measure.

Institutional ownership stability measurement is adopted from the measurement developed by Coffey & Fryxell (1991), in accordance with the standard Poor's Stock Guide of 1984. The measurement is formulated by: a + b = c.

$$\text{Institutional ownership} = \frac{\text{total institutional share ownership}}{\text{total outstanding shares}}$$

Quality of audit which is proxied by the size of accounting firm is measured using a dummy variable as outlined in the study by Yeung & Lento (2018). It is assigned a value of 1 if a company is audited by one of the Big Four accounting firms or their affiliates in Indonesia, and 0 if audited by non-Big Four firms or their affiliates in Indonesia. The list of Big Four accounting firms and Big Four affiliated are detailed in Table 1.

Table 1 Big Four Accounting Firms and their Affiliates in Indonesia

Big Four Accounting Firms	Big Four Affiliated in Indonesia
Pricewaterhouse Coopers (PwC) Indonesia	KAP Tanudiredja, Wibisana and Partner (2011 – 2015) changes to KAP Tanudiredja, Wibisana, Rintis and Partner
Klynveld Peat Marwick Goerdeler (KPMG) Indonesia	Siddharta Widjaja and Partner
Deloitte Touche Tohamatsu Limited Indonesia	Osman Bing Satrio and Eny (2011-2015) changes to Satrio Bing Eny and Partner
Ernst and Young (EY) Indonesia	KAP Purwantono, Suherman and Surja (2011 - 2015) changes to Purwantono, Sungkoro & Surja

Source : (Manto & Manda, 2018)

RESULTS

The purpose of data description is to provide an overview or explanation of the characteristics of the data variables employed in the research. This function includes identifying the minimum value, maximum value, average value, standard deviation (which indicates the extent of deviation in the data spread for each variable), and the total amount of data analyzed.

Table 2 Decriptive statistic

Variabel	Minimum	Maximum	Mean	Std. Deviation
Stock Price Crash	1.0341	1.210	1.075	0.037
Operating Cash Flow Opacity	-35.8905	29.199	-2.435	15.897
Institutional Ownership	5.8532	29.706	11.002	4.043
Audit Quality	0	1	0.400	0.491

Source: Processed data (2022)

Table 2 shows the minimum value, maximum value, average and standard deviation of the variables studied for companies that experienced a crash and were listed on the IDX in the 2020 observation year with a total of 178 companies observed. The stock price crash variable has a minimum value of 1.034; maximum value of 1.21; and the average value is 1.075 with a standard deviation of 0.037.

PT Alakasa Industrindo Tbk holds the minimum value of -35.89 for operating cash flow opacity variable, while PT Borneo Olah Sarana Sukses Tbk holds the maximum value of 29.706. The average value is -2.435 with a standard deviation of 15.897.

PT Citra Tubindo Tbk. holds the lowest institutional ownership value of 5.85, while PT Blue Bird Tbk. holds the highest value of 29.70. The average institutional ownership value is 11.00, with a standard deviation of 4.04.

The audit quality variable in this study is a dummy variable where companies that are audited by the BIG 4 accounting firm and its affiliates are coded 1, and those that do not are coded 0, so that the results of descriptive statistics show a minimum value of 0, a maximum of 1, and an average value of 0. The average is 0.4 with a standard deviation of 0.491.

Data description offers an overview of the characteristics of the variables used in the study. Its function is to determine the minimum, maximum, mean, standard deviation (which reflects the degree of deviation in data dispersion for each variable), and the volume of data analyzed.

Table 3 Multiple Linear Regression Analysis Test Results

Variable	Coefficient Value	T Value	Sig Value	F/Sig. Value	$R/R^2/Adj.R^2$
Operating Cash Flow Opacity	0,001	5,407	0,0000	95,245/ 0,00000001	0,788/ 0,622/ 0,615
Institutional Ownership	0,004	9,100	0,0000		
Audit Quality	-0,029	-6,389	0,0000		
Constanta	1,044	178,861	0,0000		

Source: Processed data (2022)

Based on the results of data processing using the SPSS program in Table 3, the multiple linear regression equation is obtained as follows :

$$\mathbf{Y = 1{,}044 + 0{,}001X_1 + 0{,}004X_2 - 0{,}029X_3 + e}$$

The F value is 96.211 with a significance value of 0.000 or less than 0.05. This shows that there is a simultaneous influence of operating cash flow opacity, institutional ownership, and audit quality on stock price crashes.

The R value is 0.788, which shows that there is a relationship between operating cash flow opacity, institutional ownership, and audit quality with a stock price crash of 0.788 or 78.8%. Meanwhile, the R Square value is 0.622, which shows that the large variation in the variable operating cash flow opacity, institutional ownership, and audit quality in explaining the stock price crash variable is 0.622 or 62.2%, while the remaining 37.8% is explained by other variables in outside research.

DISCUSSION

The Effect of Operating Cash Flow Opacity on Stock Price Crash

The results of the regression analysis indicate that operating cash flow opacity affects stock price crashes. From the test results , as shown in Table 3, reveal that the operating cash flow opacity variable is statistically supported to influence stock price crashes because it has a significance value of less than 0.05, namely 0.00. Therefore, the second hypothesis of this study is accepted.

The findings of this study are consistent with research conducted by Cheng et al. (2020). To the extent that operating cash flow opacity facilitates the accumulation of bad news and the diversion of resources over long periods of time, then operating cash flow opacity positively influences future stock price crashes.

The Effect of Institutional Ownership on Stock Price Crash

The results of regression testing show that institutional ownership influences stock price crashes. In the test results which can be seen in table 4.4, it is known that the institutional ownership variable is statistically supported to influence stock price crashes because it has a significance value of less than 0.05, namely 0.00. Thus, the third hypothesis in this study is accepted.

The results of this research are in line with the results of Fan & Fu (2019) and Ghadim & Fard (2021), where there is a positive relationship between institutional ownership and stock price crashes with the assumption that hoarding bad news is exacerbated by weak monitoring of institutional investors because their positions are small. happen. Basically, Stock price crashes harm investors' wealth and undermine their confidence,, but in short-term investments, ownership held by many institutions, and competition for information from institutional investors can increase the occurrence of stock price crashes.

The Effect of Audit Quality on Stock price crash

The results of the regression analysis indicate that audit quality impacts stock price crashes. In the test results, as displayed in Table 4.4, indicate that the

audit quality variable is statistically supported to influence stock price crashes because it has a significance value of less than 0.05, namely 0.00. Thus, the fourth hypothesis of this study is accepted..

The results align with the findings of Chae et al. (2020) and Yeung & Lento (2018) tested the effect of audit quality on accident risk using Big 4 accounting firms as a measurement proxy. The research concluded that audit quality is inversely related to the likelihood of a stock price crash. This means that companies that are audited by auditors from Big4 accounting firms, mitigate the risk of accidents by reducing information asymmetry.

CONCLUSIONS AND RECOMMENDATIONS

Based on the study's results and testing, the following conclusions can be made: Operating cash Flow Opacity, Institutional Ownership, and Audit Quality simultaneously influence Stock price crashes, Operating cash Flow Opacity has a positive influence on Stock price crashes. Institutional Ownership has a positive effect on Stock price crashes, Audit Quality has a negative effect on Stock price crashes.

FURTHER STUDY

For further research, it is hoped that we will add additional years of observation or use quarterly reports and add analysis units with companies that have not experienced stock price crashes, so that they can be used as comparisons. For future research, it is recommended to include additional variables that could impact stock price crashes.

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