

THE INFLUENCE OF STOCK LIQUIDITY, DEBT MATURITY AND INSTITUTIONAL OWNERSHIP ON THE STOCK PRICE CRASH RISK OF COMPANIES LISTED ON THE LQ45 INDEKS FROM 2019-2023.

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Keyword

Stock Liquidity, Debt Maturity, Institutional Ownership, Stock Price Crash Risk

Abstract

This study aims to analyze the effect of stock liquidity, debt maturity, and institutional ownership on the stock price crash risk of companies listed on the LQ45 index from 2019 to 2023. The population of this study consists of companies listed on the LQ45 index for five consecutive years, selected using a purposive sampling technique, resulting in a sample of 23 companies. This study uses secondary data in the form of financial reports obtained from the Indonesia Stock Exchange and other sources, namely Yahoo Finance. The data were analyzed using a panel regression analysis technique. The results of this study indicate that debt maturity has a positive and significant effect, while stock liquidity and institutional ownership have no significant effect on the stock price crash risk of companies listed on the LQ45 index from 2019 to 2023.

INTRODUCTION

The capital market is a place to trade securities by connecting parties who need funds with parties who have excess funds. The role of the capital market encourages companies to compete with each other to attract investors to invest in the company. One way to obtain funding is by selling the company's shares, as shares are a preferred medium for investors. According to the Financial Services Authority, shares are defined as a sign of capital participation of an individual or business entity in a company. Shares have a fluctuating nature, which is very common in economic theory, where stock prices move according to market demand and supply. Investors use stock prices as a benchmark for their interest in buying shares. Investors tend to have confidence when stock prices rise and become very cautious when stock prices decline (Basyir & Kusuma Wardani, 2022).

The emergence of negative news regarding PT Garuda Indonesia in 2019, related to the controversy over the suddenly soaring financial statements, triggered suspicion among stakeholders about the company's prospects. The controversial financial statements, with unexpectedly skyrocketing company profits, cast doubt on the veracity of the information provided by the company. The impact of this sudden negative information resulted in adverse investor behavior towards the company, causing a drastic decline in a short period (Gabriella, 2018).

Stock price crash risk is a risk that arises when management conceals information that is unfavorable to the company, causing the information to accumulate and eventually be revealed all at once, which results in a sharp decline in the company's stock price within a short period. Stock price crash risk can trigger panic among investors and lead to large-scale selling, causing further price declines. Although incidents of stock price crash risk occur frequently, there is still

considerable uncertainty regarding why the market cannot anticipate them. Some opinions suggest that company managers prefer to withhold the disclosure of negative news to prevent an even worse impact (Butar Butar & Murniati, 2021).

(Hutton, Marcus, and Tehranian 2009) said that bad news about the company is known as Bad news hoarding. It is a situation where managers are more likely to hide and also hold bad news and tend to disclose good news first. Because negative information disclosed by the company will cause negative investor behavior which triggers a stock price crash.

Stock price crash risk is a complex phenomenon in the financial world. The main reason this topic is considered interesting to study is due to the significant implications of stock price crash risk on financial market stability. Stock price crashes not only directly harm investors but can also trigger a domino effect that impacts other economic sectors, such as reduced consumption and investment. Furthermore, research on stock price crash risk remains limited, particularly in developing countries like Indonesia, creating a valuable opportunity to conduct empirical analysis using local data to identify the variables that influence this risk.

Although stock prices are one of the most studied topics in finance, most research on stock prices focuses on themes such as market efficiency, price volatility and fundamental factors that affect stock prices. Therefore, the purpose of this study is to cover the gap in research on stock prices. by conducting research on stock price crash risk with its influencing factors, then helping companies and financial institutions to develop effective mitigation strategies in minimizing the possibility of drastic stock price crash risk.

The company itself is the source of internal elements that affect stock price crash risk. The danger of stock price crash risk is caused by the company's internal variables, which include debt maturity, earnings management, stock liquidity, institutional ownership, basic characteristics of the company, and future expectations. In addition, companies are affected by external variables that increase stock price crash risk. These include basic macroeconomic circumstances, changes in the value of the currency relative to other currencies, government policies, and exchange rate panics.

Previous research only examined the relationship between Stock Liquidity and stock price crash risk. However, in this study the authors want to expand the research by adding Debt Maturity and Institutional Ownership variables to find out how these variables affect stock price crash risk. Stock liquidity plays an important role in determining how quickly stocks can be traded without affecting them, so it has an influence on market reactions to bad news, debt maturity reflects the company's financial health and potential bankruptcy risk, this has a direct impact on investor perceptions, and institutional ownership which shows the decisions made by institutional investors when bad news appears.

One of the criteria that investors use when evaluating stocks is stock liquidity. High trading volume and little price difference between buying and selling indicate the liquidity of a company's stock, which makes it easy for investors to buy a particular stock and resell it without having to drastically reduce the price. Stock liquidity provides price information on the market The more availability of stock price information is able to describe investors about the condition of the company, further limiting the possibility of company managers hiding bad news that causes stock price crash risk. Previous research conducted by(Chang, Chen, & Zolotoy 2017), shows that stock liquidity can increase stock price crash risk in company shares. This is contrary to research showing that stock liquidity can reduce the possibility of stock price crash risk(Chauhan, Kumar, and Pathak 2017).

In addition to stock liquidity that can affect stock price crash risk, debt maturity structure or debt issuance can affect stock price crash risk. In order to benefit from debt with a longer maturity, the responsibility to repay the debt will reduce abnormal or excessive investment with the most agency difficulties, thus lowering the probability of a stock crash. Depending on the type of debt, the timing of debt repayment will impact the liquidity of the company's shares. Starting on the date the financial situation report is prepared, the length of debt is calculated. Long-term debt and short-term debt are separated by maturity. If the company is able to pay off its long-term debt within one year or one accounting period, then the debt can be short-term (Karnila 2018).

Research conducted by (Hasan et al. 2020), shows that stock price crash risk is positively influenced by long-term debt structure, meaning that businesses with a large percentage of long-term debt relative to their capital structure are more likely to face a higher risk of stock crashes. In contrast, research by (Wang, Han, and Huang 2020), concluded that the long-term debt structure has no significant effect on stock price crash risk.

Then another variable that can affect stock price crash risk is institutional ownership. When bad news appears, institutional investors often make large-scale stock sales due to short-term investment strategies and the sensitivity of institutional investors to the dynamics of changing market conditions. Institutional investors minimize losses by taking action to sell shares on a large scale, where this action will trigger a domino effect that increases stock price crash risk.

Research by (Fan & Fu 2020), found that the chance of stock price crash risk is positively affected by institutional ownership because it increases selling pressure when businesses release negative news, which increases stock price crash risk. However, the condition of companies with strong institutional ownership then predicts the emergence of stock price crash risk, which contradicts previous research by (Aldhamari et al. 2023), who concluded that institutional ownership has a negative influence on stock price crash risk.

Based on the background description, researchers are interested in researching stock liquidity, debt maturity structure, and institutional ownership of stock price crash risk in companies listed in the LQ 45 index for the 2019-2023 period. This research will take observations on companies listed in the LQ 45 index listed on the Indonesia Stock Exchange from 2019-2023. This research is expected to help add empirical evidence as a form of strengthening of previous research research.

The selection of the LQ 45 index in this study is based on the LQ45 stock index which measures the price performance of 45 stocks on the Indonesia stock exchange with a variety of different industrial fields that have high market capitalization. LQ45 stocks are in great demand by investors, so LQ 45 stocks can reflect overall market sentiment. stocks listed in the LQ 45 index must have high liquidity with good quality. However, companies in this stock index are also vulnerable to the emergence of bad news. In order to protect their reputation and share price, companies tend to withhold bad information in the company and prefer to announce good news in order to maintain their position in the LQ45 index.

Based on the background information provided, the following hypothesis can be formulated:

- H1 = Stock liquidity has a negative and significant influence to stock price crash risk
- H2 = Debt maturity has a positive and significant influence to stock price crash risk
- H3 = Institutional ownership has a positive and significant influence to stock price crash risk.

METHOD

1. Data and sample

This study uses a quantitative approach according to (Sugiyono 2017), quantitative research is a method based on positivism philosophy, which aims to examine a specific population or sample using research instruments as tools to collect data. The data obtained is then analyzed quantitatively using statistical techniques to test the formulated hypothesis. The population in this study was companies listed in the LQ45 index for 2019-2023 using purposive sampling techniques, resulting in a sample of 23 companies.

The data source used in this study is secondary data. Secondary data is taken from the financial reports of the entities in the sample. The data collection method use documentation and literature study method by collecting reading materials and analyzing the financial reports of the companies in the sample. This study uses data obtained from the official website of the Indonesia stock exchange and other sources namely yahoo finance

2. Variable definition

a) Stock price crash risk

Stock price crash risk is that type of risk that arises when a company's stock price experiences a sudden decline due to negative information that continuously covered up by managers

(Farizaki & Hernawati 2021). When stock prices are on an upward trend, investors are encouraged to actively engage in trading. However, investors with limited information may become skeptical about the trend and choose to postpone their transaction, ultimately leading to a decline in stock prices.

Referring to the model developed by (Dang et al. 2018)(Chang, Chen, and Zolotoy 2017) writer used two measurements of firm *i* to estimate model (1) and obtain the residual e_{it}

$$R_{jt} = \alpha + \beta_1 r_{m,t-2} + \beta_2 r_{m,t-1} + \beta_3 r_{m,t} + \beta_4 r_{m,t+1} + \beta_5 r_{m,t+2} + e_{j,t} \dots \dots \dots (1)$$

$$NCSKEW = \frac{(\sum w_{j,t}^3 n(n-1)^{3/2})}{(\sum w_{j,t}^2)^{3/2} (n-1)(n-2)} \dots \dots \dots (2)$$

b) Stock liquidity

The extent to which shares can be traded within a certain period on the stock market. Shares with high liquidity are easier to trade, whether selling or buying. And can also be converted into cash more quickly (Octaviani and Komalasari 2024)

This study uses trade volume in activity in measuring liquidity :

$$\frac{\text{Number of shares traded}}{\text{Number of shares outstanding}}$$

c) Debt maturity

Refers to the period of time during which the borrower must repay the debt to the creditor (Berliana, Yuniati, and Dewi 2022). The longer the maturity of a company's debt, the greater the management's freedom to manage cashflow and financial reporting strategies. However, this flexibility can increase information asymmetry between management and shareholders because management has the space to withhold negative information longer without pressure from short-term creditors.

This study uses long debt maturity in measuring debt maturity:

$$\frac{\text{Long term debt}}{\text{Total debt}}$$

d) Institutional ownership

Institutional ownership is a condition in which company shares are owned by institutional entities or institutions. These can be government institutions, private institutions, domestic or foreign.

In measuring institutional ownership this study uses:

$$\frac{\text{Number of shares held by institutions}}{\text{Number of shares outstanding}}$$

RESULTS

1. Model Regression Panel Data.

Based on the panel data regression model selection test in this study through the Chow, Hausman, and Lagrange Multiplier test, the selected model was the Common Effect Model (CEM).

2. Asumsi klasik test.

a. Multikolinieritas test.

	X1	X2	X3
X1	1.000000	0.097967	0.431535
X2	0.097967	1.000000	0.346334
X3	0.431535	0.346334	1.000000

The test results showed no multicollinearity because the correlation coefficient of the independent variables was < 0.85 .

b. Heteroskedasticity test.

The conclusion from the heteroskedasticity test shows that all independent variables have a probability value $> 0,05$ in the Glejser test, so it can be concluded that the regression model does not show symptoms of heteroskedasticity.

3. Hypothesis test.

a. Coefficient determination test (R^2)

Referring to the result of the panel data regression analysis, it can be seen that the coefficient of determination (r^2) is 0,060405 or 6,04%. Which means that the variation in changes in the dependent variable can be explained by the three independent variables. And the remainder is explained by other variables outside the independent research variables.

b. Significance test (F)

F-Statistic	Prob (F-Statistic)	Sum Squared Resid
3.442967	0.019257	78.42138

The analysis results on the F statistical test resulted in an Fcount of 3,442967. The Ftable value with degrees of freedom: $df_1 = k-1$ and $df_2 = n-k$ ($n=115, k=4$) or $df_1=3$ and $df_2=111$ with a confidence level of 95% shows the number 2,69. So Fcount is greater than Ftable ($3,442967 > 2,69$). The F test results show that the panel data regression model in this study is declared feasible to estimate the population or meet the Goodness of fit.

c. Hypothesis Test (t)

Testing with analysis to test the hypothesis that partially influential variables stock liquidity, debt maturity, and institutional ownership have a significant effect on stock price crash risk. Based on the error rate (α) = 0,05 and with a degree of freedom (df) = $n(n-k)$, the one-sided test table value (df) = $(115-4) = 111$ is obtained, which is 1,98157. The hypothesis test results can be seen as follows:

Variabel	t_{hitung}	t_{tabel}	prob
TVA	-1.580575	-1.98157	0.1168
STDebt	2.196962	1.98157	0.0301
KI	1.309365	1.98157	0.1931

Stock liquidity has tcount value is -1,580575 while the ttable value is -1.98157, which means that the tcount value is greater than ttable value ($-1,580575 > -1,98157$). When viewed from the significance value of 0,1168 greater than the alpha value ($0,1168 > 0,05$), it means that H_0 accepted and H_a is rejected, which means that stock liquidity has no effects on stock price crash risk.

Debt maturity has the tcount value is 2.196962, while the ttable value is 1.98157, which means that the tcount value is greater than the ttable value ($2.196962 > 1.98157$). When viewed from the significance value, which is 0.0301, it is smaller than the alpha value ($0.0301 < 0.05$). So that H_0 is rejected and H_a is accepted, meaning that partially the effect of Debt Maturity on stock price crash risk is positive and significant.

Institutional ownership has the tcount value is 1.309365 while the ttable value is 1.98157, meaning that the tcount value is smaller than the ttable value ($1.309365 < 1.98157$). When viewed from the significance value of 0.1931 greater than the alpha value ($0.1931 > 0.05$), it

means that H_0 is accepted and H_a is rejected, meaning that institutional ownership has no influence on stock price crash risk.

4. Discussion of research results.

Based on hypothesis testing, the t -count value of -1.580575 is greater than the t -table value of -1.98157 with a significance value of 0.1168 greater than the alpha level used ($0.1168 > 0.05$), so the first hypothesis H_a which states that stock liquidity has a negative and significant effect on stock price crash risk of companies listed in the LQ45 index is rejected.

The results of this study are in line with the research of Septiani & Handayani (2025) in this case the high and low stock prices are not always a measure of stock price crash risk. Stock liquidity with the proxy TVA of outstanding shares is not always a big influence on stock prices. Because stock prices can also be influenced by macroeconomic conditions such as uncertain economic policies, financial crises and other factors.

Based on hypothesis testing, the t -count value of 2.196962 is greater than the t -table value of 1.98157 with a significance value of 0.0301 smaller than the alpha level used ($0.0301 < 0.05$), so the second hypothesis H_a which states that Debt maturity has a positive and significant effect on stock price crash risk of companies listed on the LQ45 index, is accepted.

The results of this study support the research of (Hasan et al. 2020), (Wang, Han, and Huang 2020)(Chang, Chen, and Zolotoy 2017) which states that Debt maturity has a positive and significant effect on stock price crash risk. The results of this study are also in line with signal theory which says that the higher the level of debt will also give a negative signal to investors, this condition can jeopardize the company's financial performance in the absence of effective management. The results of this study are also in line with the bad news hoarding theory where when the level of debt is high, the company's financial performance will be threatened by the emergence of bad news if one day the company is unable to effectively manage the company's financial performance.

Based on hypothesis testing, the t -count value of 1.309365 is smaller than the t -table value of 1.98157 with a significance value of 0.1931 greater than the alpha value ($0.1931 > 0.05$), so the third hypothesis (H_a) which states that institutional ownership has a positive and significant effect on the stock price crash risk of companies listed in the LQ45 index, is rejected.

Institutional ownership has not been able to properly supervise company management to accumulate bad news that results in stock price crash risk, this could be because institutional ownership in the companies studied is classified as temporary institutional investors (Farizaki & Hernawati 2021). This study supports the research of (Berliana, Yuniati, and Dewi 2022) which states that institutional ownership does not affect stock price crash risk.

DISCUSSION

This consists of finding of the research derived from data analysis. The finding may relevant or support a theory (ies) or against the theory (ies). Use theoretical bases in the discussion.

CONCLUSION

1. Conclusion.

The conclusion of this study is that debt maturity affects stock price crash risk, indicating that a company's debt structure plays an important role in analyzing the occurrence of stock price crash, while stock liquidity and institutional ownership do not have an impact. This could be because when a company has issues with stock management the low stock price could be due to the stock having a target market rather than solely pursuing stock liquidity itself. Additionally, for institutional ownership in this study, it could be because the proportion held by institutional investment is still relatively small, thus not influencing stock price crash risk.

2. Suggestion.

- a. Further research could add other variables or periods, or other sector could be added for future research.
- b. Institutional ownership in this study had No. effect on the stock price crash risk of companies in the LQ45 index. This may be due to the low proportion of institutional

ownership in the company studied. For further research, samples with a large proportion of ownership could be sought.

REFERENCES

- Aldhamari, R., Mohamad Nor, M. N., Al Farooque, O., & Al-sabri, H. M. (2023). *Risk committee and stock price crash risk in the Malaysian financial sector: The moderating role of institutional ownership*. Journal of Accounting in Emerging Economies, 13(3), 509–540. <https://doi.org/10.1108/JAEE-09-2021-0298>
- Basyir, T. F., & Kusuma Wardani, D. A. (2022). *Pengaruh data akuntansi terhadap harga saham perspektif sebelum dan setelah adopsi XBRL*. Akurasi: Jurnal Studi Akuntansi dan Keuangan, 5(1), 61–76. <https://doi.org/10.29303/akurasi.v5i1.133>
- Berliana, A., Norromadani Yuniati, R. A., & Dewi, A. (2022). *Analisis pengaruh trading volume activity dan debt maturity structure terhadap stock price crash risk*. Proceeding Maritime Business Management Conference, 02(01).
- Butar Butar, S., & Murniati, M. P. (2021). *How does financial reporting quality relate to stock price crash risk? Evidence from Indonesian listed companies*. Jurnal Dinamika Akuntansi dan Bisnis, 8(1), 59–76. <https://doi.org/10.24815/jdab.v8i1.19399>
- Chang, X., Chen, Y., & Zolotoy, L. (2017). *Stock liquidity and stock price crash risk*. Journal of Financial and Quantitative Analysis, 52. <https://doi.org/10.1017/S0022109017000473>
- Chauhan, Y., Kumar, S., & Pathak, R. (2017). *Stock liquidity and stock prices crash-risk: Evidence from India*. North American Journal of Economics and Finance, 41, 70–81. <https://doi.org/10.1016/j.najef.2017.04.003>
- Dang, V. A., Lee, E., Liu, Y., & Zeng, C. (2018). *Corporate debt maturity and stock price crash risk*. European Financial Management, 24(3), 451–484. <https://doi.org/10.1111/eufm.12134>
- Fan, Y., & Fu, H. (2020). *Institutional investors, selling pressure and crash risk: Evidence from China*. Emerging Markets Review, 42, 100670. <https://doi.org/10.1016/j.ememar.2019.100670>
- Farizaki, W. A., & Hernawati, E. (2021). *Pengaruh corporate governance dan overvalued equity terhadap stock price crash risk*. Universitas Pembangunan Nasional Veteran Jakarta, 2(1), 1–16. Retrieved from www.upnvj.ac.id
- Gabriella, T. (2018). *Pengaruh audit delay, likuiditas saham, spesialisasi auditor industri, tenur audit, independensi dewan komisaris dan konservatisme terhadap stock price crash risk*.
- Hasan, M., Rahman, D., Taylor, G., & Oliver, B. (2020). *Crash risk and debt maturity: Evidence from Australia*. International Journal of Managerial Finance, 17(3), 377–400. <https://doi.org/10.1108/IJMF-12-2019-0467>
- Hutton, A. P., Marcus, A. J., & Tehranian, H. (2009). *Opaque financial reports, R2, and crash risk*. Journal of Financial Economics, 94(1), 67–86. <https://doi.org/10.1016/j.jfineco.2008.10.003>
- Karnila. (2018). *Analisis pengaruh kualitas laporan keuangan dan maturitas utang terhadap efisiensi investasi*.
- Octaviani, S., & Komalasari, D. (2024). *Pengaruh likuiditas, profitabilitas dan solvabilitas terhadap harga saham*. El-Mal: Jurnal Kajian Ekonomi & Bisnis Islam, 5(4), 2087–2104. <https://doi.org/10.47467/elmal.v5i4.878>
- Septiani, E. M., & Handayani, D. F. (2025). *Pengaruh debt maturity dan stock liquidity terhadap stock price crash risk*, 3(1), 33–44.
- Sugiyono. (2017). *Metode penelitian kuantitatif, kualitatif, dan R&D*. Bandung: Alfabeta.
- Wang, M., Han, M., & Huang, W. (2020). *Debt and stock price crash risk in weak information environment*. Finance Research Letters, 33, 1–6. <https://doi.org/10.1016/j.frl.2019.05.004>