

Research Article

Enhancing Transparency to Mitigate Information Asymmetry: A Study of LQ 45 Companies

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Abstract.

Transparency is essential in information asymmetry as it enables involved parties to make more informed and fair decisions, reducing the risks of inequality and conflicts arising from information ambiguity. With transparency, a conducive environment is created where all parties have equal access to relevant information, supporting integrity and enhancing efficiency in decision-making processes. This study aims to determine the effect of liquidity, and solvency on information asymmetry in LQ 45 companies in 2021 during the Covid-19 pandemic. This study employs a quantitative methodology and is classified as correlational in nature. Secondary data were utilized in this research, which were obtained through observation and documentation from the idx.co.id website and the official website of the organization, which is located at LQ45 2021. Concurrently, employ a linear regression analysis technique to judge the relationship between variables twice. With values of -8561 , the results of this study indicate that liquidity has a marginally significant negative impact on information asymmetry. This indicates that $t_{count} > t_{table}$ with an important value of 0.001 , is < 0.05 . However, information asymmetries are not significantly impacted negatively by the solvency ratio. Furthermore, these results demonstrate that alongside solvency and liquidity, one can reduce the information asymmetry that stakeholders acquire.

Keywords: asymmetry information, liquidity, solvency, LQ45

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1. Introduction

An concept that influences investigations into the extent of voluntary information disclosure is agency theory. Agency theory, as defined by Zwalf [1], pertains to a contractual arrangement between a principal and an agent. In this arrangement, the principal engages the agent to execute tasks on their behalf, and the agent complies with the principal's instructions. key areas of concern. Agency theory is now frequently used to define the state of a business, from owners to management. According to DiMaggio [2], it is possible that management will not always act in the interests of the capital owners if there are equally strong economic incentives from the two partners in the relationship. The term "agency conflict" is then used to describe this conflict of interest.

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Information asymmetry is often also explained using agency theory. Because principals do not have sufficient knowledge about agent performance, information asymmetry may arise [3]. Information asymmetry is a different way of looking at information asymmetry; it occurs when managers are more knowledgeable than shareholders and other stakeholders about internal information and future business possibilities [4]. In particular, if information is related to managers' performance measurements, the existence of information asymmetry will encourage managers to offer incorrect information. As a result, managers have a responsibility to inform owners and investors about the state of the company. So that principles can never determine how much an agent's efforts contribute to the actual results of the company. Due to the information gap between management and business owners, managers may have the opportunity to behave opportunistically, harming owners by managing profits related to the company's financial performance [5]. It is believed that information asymmetry is the main cause of agency problems [6]. According to certain information asymmetry studies, a business can be considered successful if it has less information asymmetry. By providing useful and relevant financial data, information asymmetry can be reduced [7]. In addition, management has the option to freely disclose information about the company [8].

Naturally, this can reduce information asymmetry and increase the acceptance of information by stakeholders. Corporations are responsible for agency costs when there are conflicts of interest and information asymmetries. According to Ramirez et al. [9], when the level of debt dependence is getting bigger, voluntary disclosure of intellectual capital is used as a way to save on agency costs. Major borrowers or want to monitor the success of the companies they lend money to when the amount of dependency or debt leverage is greater. You might refer to these expenses as monitoring fees. Bonding costs are a secondary agency cost. Agents must spend money on bonds to ensure that they will not take any action that could harm the principal. The total welfare (wealth) of the principal and agent after the agency connection has decreased, while this is a residual loss. Roszkowska [10] argued that increasing information in annual reports is one way to save on agency costs.

A research conducted by Daadaa [11] demonstrates that bid-ask spreads have the explicit capability of assessing information asymmetry. Furthermore, he underscores the significance of the bid-ask spread in augmenting the efficacy of the identified information asymmetry [11-13]. The bid-ask spread measurement method can detect information asymmetries and provide faster access to their results. Not only can the bid-ask spread serve as an accurate indicator of information asymmetry. On the other

hand, this could also suggest adverse selection issues that arise from stock transactions due to the fact that more informed investors purchase particular equities [14]. Hence, the bid-ask spread is employed as a surrogate for information asymmetry in the present study.

Due to the considerable importance attributed to the liquidity of corporations with legal entities, the subject matter of this research is the LQ 45 2021 index [15]. Additionally, numerous investors may consult LQ 45 2021 when making investment decisions [16]. This is due to the fact that the LQ 45 2021 data remains within the range of the preceding four years, thereby guaranteeing that further variables or circumstances will not have an adverse effect on the Indonesian economy's current outstanding state. 45 represents forty-five company shares, whereas LQ denotes liquid assets [17]. The LQ 45 index is designed to supplement the Composite Stock Price Index (IHSG) [18]. Furthermore, it provides an unbiased and reliable instrument for investment managers, financial researchers, and investors to monitor fluctuations in the valuation of actively traded stocks [19]. The researchers, influenced by the identified issues and proposed solutions, examined the impact of liquidity and solvability on the information asymmetry of LQ 45 companies in 2021 amidst the Covid-19 pandemic.

2. Methods

This study used a quantitative-correlation research design to examine the causal connections between variables, specifically the impact of liquidity and solvency on information asymmetry. Concurrently, several methodologies for the analysis of linear regression were used to investigate the correlation between variables. The research population included 45 LQ 45 businesses, selected according to the necessary demographic criteria. The companies that consistently appear on the LQ 45 index for the period of 2020-2021 are subject to certain criteria in this research. This study employs the 2020 LQ 45 index as the subject of investigation because of the high liquidity of the incorporated firms. Moreover, the LQ 45 2021 index might serve as a valuable point of reference for several investors when making investment choices [20]. The reason for this is that the 2021 LQ 45 data is within the range of the last four years, indicating that the status of the Indonesian economy, which remains rather robust, is not influenced by external causes or conditions.

The term "LQ" is derived from the word "LiQuid," while the number 45 represents the quantity of shares associated with it. The LQ 45 index serves as a supplementary

measure to the Jakarta Composite Index (IHSG). Additionally, it serves as a source of impartial and dependable instruments for conducting financial research, aiding investment managers and investors in tracking the fluctuations in the prices of actively traded equities [21]. Thus, there are continuously 40 enterprises that exist as a sample in the LQ 45. The research data was gathered via the use of documentation and observation techniques, using data acquired from the idx.co.id website. The LQ 45 sample comprises 40 extant enterprises. The research used SPSS 26 as the tool for data analysis. Furthermore, the data analysis included the use of descriptive stats, classical assumptions tests, and research hypothesis testing.

3. Results

3.1. Data analysis results

3.1.1. Description of liquidity data

From Table 1, then categorize the data based on its level. Categorizing here is placing subjects into separate groups in stages according to a continuum based on attributes. The continuum of this level is like an example from low to high. In order to interpret the results of liquidity, it is carried out through three categories consisting of low, medium, and high. The guidelines are from Notar et al. [22], presented in Table 1.

TABLE 1: Standard score formulas.

Category Guidelines	Levels
$X \geq M + 1. SD$	High
$M - 1. SD < X \leq M + 1. SD$	Medium
$X < M - 1. SD$	Low

Based on the guidelines above, the data is categorized based on its level. The categorization of research liquidity can be seen in table 1. Out of 80 companies, 13 companies have low liquidity (18.6%), 69 companies have moderate liquidity (71.0%), and eight companies have high liquidity (10%). The categorization of liquidity variables can be seen in Table 2.

TABLE 2: Categorization of liquidity variable companies.

Categorization	N	Percentage (%)
Liquidity	80	100
Low	13	18.6
Medium	69	71.
High	8	10

3.1.2. Solvability data description

Table 3 then categorizes solvency variables based on their level. They are categorized here using a similar method as above. Based on the guidelines above, the data is categorized based on its level. Solvability categorization can be seen in table 3 From the 80 data, 60 companies have moderate solvency (85.7%), and 20 have high solvency (14.3%).

TABLE 3: Categorization of solvency variable research data.

Categorization	N	Percentage (%)
Solvency	80	100
Low	0	0
Medium	60	85,7
High	20	14.3

3.1.3. Information asymmetry data description

The degree of trust that different groups place in a company is contingent upon the presence or absence of information asymmetry. Information asymmetries occur when the level of knowledge management achieved is greater than that of the owner and other relevant organizations. The categorization of LQ45 corporate information asymmetry can be seen in table 4. Of the 80 data, 16 companies have low information asymmetry (2%), 63 companies have moderate information asymmetry (74.8%), and one company has high information asymmetry (1.2%).

Information asymmetry with the lowest value was obtained by Gudang Garam Tbk. by 0.000152%. Meanwhile, the company with the highest level of asymmetry, namely Indofood CBP Sukses Makmur Tbk. of 0.003285.

TABLE 4: Categorization of research data variable information asymmetry.

Categorization	N	Percentage (%)
Information Asymmetry	80	100
Low	16	2.0
Medium	63	74.8
High	1	1.2

3.1.4. Normality test results

The Normality test is a method used to ascertain whether the residuals, also known as confounding variables, in a regression model follow a normal distribution. Graphical and statistical analysis may be utilized to determine normality. The utilization of normal probability plots facilitates graphical analysis. The residual data is deemed to be routinely distributed if it exhibits dispersion along the line of diagonals and travels in the same direction as the diagonal line. When carrying out the statistical analysis, Kolmogorov Smirnov’s One Sample findings were examined; if the significance level is more significant than 0.05, a regular distribution pattern is found. The findings of the normality test are as follows:

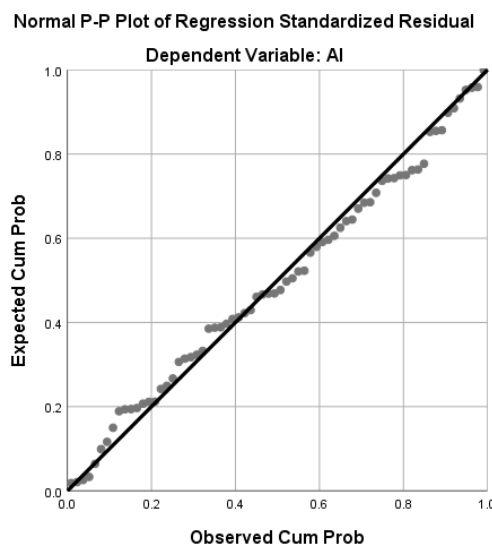


Figure 1: Normality test results with P-Plots.

TABLE 5: The results of the Kolmogorov-Smirnov normality test.

Effect	Asymp. Sig.	Monte Carlo Sig.	Information
LK+SV -> KG	0,100	0,05	Normal

The locations of the points are distributed along the diagonal axis, as shown in Figure 1. The distribution remains constant. Furthermore, as indicated by the Kolmogorov-Sminov test in Table 5, the p-value (or significance value) is 0.100, which is greater than 0.05. Therefore, the regression model can be used because it meets the normality requirements, or it can be claimed that the distribution of the research data is expected.

3.1.5. Multicollinearity test results

In order to ascertain whether the uncorrelated variables in a regression model are correlated, the test of multicollinearity is conducted. The condition in which a correlation exists is called multicollinearity. A relationship among all of the independent variables in the appropriate regression equation should be non-existent. The relationship between each of the independent variables (VIF) in this study can be ascertained by utilizing the tolerance value and inflationary variance factor. Tolerance quantifies the extent to which the variability of the chosen independent variables remains unexplained by other independent variables.

TABLE 6: Multicollinearity test results.

Variable	Collinearity Statistics	
	Tolerance	VIF
Liquidity	0.833	1.201
Solvability	0.866	1.154

All independent variables have a tolerance greater than 0.1 and a VIF value less than 10, as shown in Table 6. Given that the tolerance value exceeds 0.1 and the VIF value is below ten, it is possible to implement the regression model for the purposes of this study. Thus, the absence of multicollinearity is indicated.

3.1.6. Heteroscedasticity test results

The heteroscedasticity test is employed to ascertain whether the residuals of distinct observations in a regression model have an unequal variance. A decent regression model is one that does not account for heteroscedasticity, or homoscedasticity. Upon examination of the scatter plot, the results obtained from the heteroscedasticity test are presented below. The appropriate regression model does not exhibit any indications of heteroscedasticity due to the random generation of points, absence of a discernible

pattern, and orientation of the data points either above or below 0 on the Y-axis. The regression model is therefore applicable in practice. Heteroscedasticity is not an issue in this regression model, as shown in Figure 2, where the scatterplot points are dispersed and lack a discernible pattern.

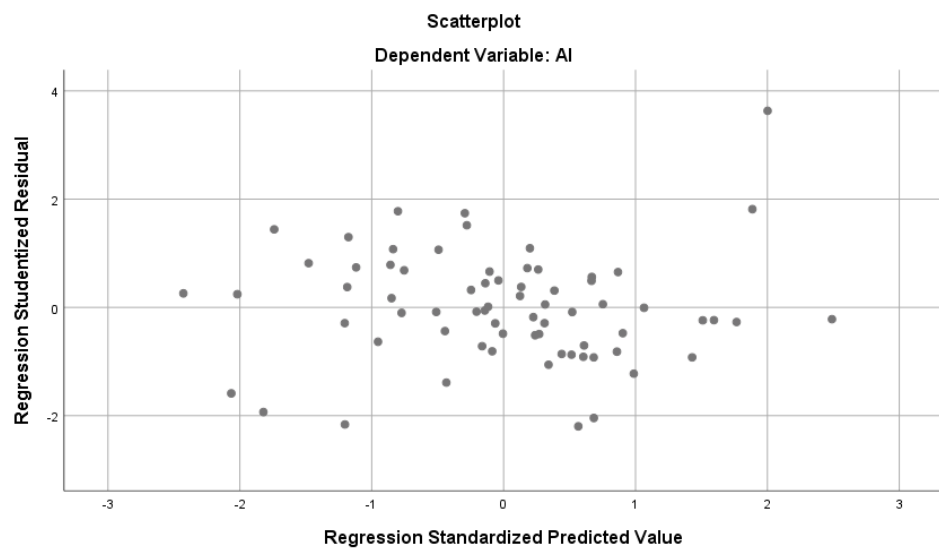


Figure 2: Findings of the heteroscedasticity test.

3.1.7. Multiple linear regression analysis

The objective of the multiple linear regression technique is to ascertain the correlation between the dependent variable, which is information asymmetry, and the two distinct variables, solvency and liquidity. The correlation between the two variables is assessed by acquiring multiple coefficients. The outcomes of the linear regression examination are presented in Table 7.

TABLE 7: The outcomes of an analysis of several linear regression models.

Variable	Regression Coefficient (β)	Coefficient of Determination (R ²)	Correlation Coefficient (R)
Liquidity (LK)	0.154	0,468	0,454
Solvency (SV)	0.223		

It is evident from Table 7 that the analysis of multiple linear regression is conducted using the following regression equation:

$$Y = 0.093 + 0,154 LK + 0,223 SV$$

The interpretation of the equation given above is as follows:

When the value of LK and SV disclosure obtained is 0 (constant), the value of AI or Y obtained becomes 0.093.

As shown in Table 7, the percentage of the coefficient of measurement R2 is 46.8%, or 0.468. This value indicates that the liquidity and solvency independent variables have a 46.8% impact on AI. Moreover, these findings serve as a benchmark when computing the residual variables that impact research by a range of 100-46.8% to 53.2%.

3.1.8. Results of t test

The t-test for significance determined whether or not there was a statistically significant relationship between the AI-dependent variable and each of the independent variables of ERM disclosure, IC, liquidity, and solvency. For the significance level to be quantified, a threshold of significance value below 5% is necessary. Additionally, in order to assess the presence of a relationship between each of these variables, an exigency must be satisfied by a value of tcount that exceeds the critical value from the ttable. However, the obtained value is the inverse of what was expected, suggesting that there is no relationship between the variables of solvency and liquidity and AI. The t-significance test results are presented in Table 8.

TABLE 8: Significance test results t.

Connection	Tcount	Ttable	Sig.	Information
LK → AI	-8.561	1.652	0.001	Accepted and Influential
SV → AI	-0.368	1.652	0.714	Rejected and Unaffected

Liquidity disclosure in opposition to information asymmetry Additionally, it is determined from the outcomes of equation 8 that the t value of the acquired liquidity is -8561,636. The significance level of this result surpasses that of the t table. Consequently, liquidity is detrimental to AI. Furthermore, a significance value of 0.001 was acquired. The obtained result is considerably less than the intended value of 0.05. Liquidity may also be considered to have a substantial impact on artificial intelligence. On the basis of the aforementioned outcomes, IC was deemed acceptable. Liquidity disclosure has a substantial adverse effect on AI in companies listed on the LQ45 in 2020-2021, according to the findings.

The t-value for solvency, as shown in Table 8, is -0.368. This outcome is less significant than the t-table. Liquidity therefore has no effect on artificial intelligence. In addition, a

significance value of 0.714 was acquired. This result significantly exceeds the expected value, which is 0.05. Additionally, it is possible to conclude that solvency has no negligible impact on AI. In light of the aforementioned findings, H4 was deemed to be rejected. As a result, it can be concluded that solvency has no negligible impact on AI in LQ45 2020-2021-listed companies.

3.2. Discussion

3.2.1. Effect of liquidity ratio on information asymmetry (AI)

Based on the data analysis that has been carried out, it is determined that for companies listed with LQ45, liquidity has a strong negative impact on AI. This means that information asymmetry will decrease the more significant the liquidity. 13.3% or 18.6% of companies have a lower level of liquidity than the others. Several things, including the impact of post-COVID-19 and climate change on business, cause this. This happened to bank BCA, whose liquidity is known to be strong, reaching 1.25 in 2020 before dropping to 0.022 in 2021.

The current ratio is the ratio used to assess a company's ability to settle short-term obligations or debts that will be billed in full at maturity. What current assets can be accessed, in other words, how much is available to meet short-term commitments that are soon due [23]. By analyzing the 2020 current ratio and applying the liquidity ratio, Utami et al. [15] state that banks in Indonesia meet the requirements. This shows that banking institutions maintained financial success during the Covid-19 epidemic by exceeding the benchmark Indonesian banks set.

Only a little research has been done on liquidity ratio to information asymmetry. However, the findings show that solid liquidity also influences information asymmetry. This study can be used as evidence that the existence of information asymmetry in a company can affect investment choices. Information managed by internal parties that can be used to make decisions for investments that are considered profitable for the company also supports this. It is clear from the property and real estate industry that a company's investment choices are only sometimes negatively affected by significant information asymmetries. Thus, even if the other party has positive or negative information about the company, the investment choice of the corporation will remain the same.

The signaling hypothesis, which argues that substantial information asymmetry will provide a poor signal for decision-making, is also supported by this. According to Quah et al. [16] research, the company information asymmetry variable can influence how investors allocate their money. Consequently, liquidity here plays an essential role in minimizing information asymmetry. The amount of information asymmetry decreases with the ratio of liquidity owned by the company.

3.2.2. Effect of solvency ratio on information asymmetry (AI)

According to the data analysis that has been done, AI in companies listed on LQ45 is not too affected by solvency findings. This conclusion is supported by the t-table value, which is -0.368 and is smaller than 1.652. The information gathered shows that the majority of LQ45 companies are quite capable. These disappointing results also suggest that a company's ability to pay its long-term debt, or its solvency, does not significantly affect its share value from information asymmetry. Many investors refer to solvency as a foreign variable because of its small short-term impact on information asymmetry [24]. Many investors still prioritize solvency over their desire to make long-term investments.

In this study the solvency is DER. The DER variable regression finding is negligible. The DER ratio itself describes the relationship between liabilities, or debt, and equity. If a company with a high level of debt in relation to its own capital defaults, it is very unlikely that investors' money will be repaid [25]. Investors now face risks as a result of which they are more likely to react negatively and cause stock prices to fall when the DER number increases [26]. Investors take into account that the company's performance can be affected by debt that exceeds capital or the risk of default.

Investors receive favorable signals regarding business valuation when a significant percentage of debtor funding comes from owner's capital when the debt to equity ratio (DER) is low. However, as long as a business is able to balance the gains and losses incurred by debt, debt growth can also support an increase in company value. When DER is high and effective management is not followed up, profits can drop to a point where information asymmetry reduces, which drives stock prices down as well [27]. According to empirical data, DER which has no impact will affect information asymmetry [26, 28]. In other words, by increasing the quality of the company, especially in balancing profits and reducing debt growth as seen from its liquidity ratio, the DER value also becomes positive and there is less information asymmetry that occurs.

According to theory, the solvency ratio calculates the amount of a company's total assets financed by creditors [18]. Therefore, the amount of debt from creditors used to fund the company's assets increases in proportion to its solvency ratio. However, the average LQ45 company has an erratic solvency ratio. They focus more on their liquidity ratios, causing financial inequality which causes companies with high debt levels to often struggle to make ends meet while making heavy debt and interest [29]. LQ 45 companies according to Sianturi and Pangestuti [30] have lost their ability to fulfill all their long-term obligations.

In addition, because information asymmetry can be distinguished by company performance from DER, consequently changes in DER have an impact on stock prices [24]. Most of the organizations in this study with the highest solvency scores were financial institutions, with BBNI and BBCA ratings of 6.61 and 5.055, respectively.

4. Conclusion

With a value of -8,561, which means that $t_{count} > t_{table}$ with a significance of 0.001, which is less than 0.05, it is possible to draw the conclusion from this research that the liquidity ratio has a major negative influence on information asymmetry. This conclusion can be reached based on the findings of the data analysis and discussion that took place. These findings also demonstrate that the amount of information asymmetry may be reduced to a greater extent because of the larger level of liquidity that a firm has. Within the context of information asymmetry, the solvency ratio does not have a substantial impact. These findings point to the existence of other factors, such as GCG, CA, REM, and CSR, which have a major impact on the information asymmetry.

Authors' Contributions

The authors made substantial contributions to the conception and design of the study. The authors took responsibility for data analysis, interpretation and discussion of results. The authors read and approved the final manuscript.

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