

Information Asymmetry as a Mediating Factor on the Relationship Between Earnings Quality and Equity Cost

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Abstract

Businesses must grow to thrive and stay competitive in the face of escalating competition. This expansion entails growing the business, innovating new products, and differentiating existing ones, all of which eventually result in a greater demand for funding. As a result, businesses need third parties, like creditors or investors, who can provide cash. This study aims to investigate the relationship between the cost of equity and the quality of earnings, as well as the effect of asymmetric information as an intervening variable. Discretionary accruals are used to quantify the quality of earnings; they are computed using the Modified Jones Model. In the meantime, bid-ask spreads and price-earning ratios are used to measure asymmetric information and the cost of stock. The main theoretical framework for this research is agency theory. Twenty companies from the consumer products manufacturing industry were chosen for the research sample using purposive sampling in the years 2020–2022. Path analysis is the research method used in this study to explain the linkages that exist both directly and indirectly between the cost of equity, asymmetric knowledge, and the quality of earnings. It is clear from the path analysis results that the cost of equity is not directly impacted by the quality of earnings. Additionally, the testing of the second hypothesis shows that, in the absence of asymmetric information acting as an intervening variable, the quality of earnings has no indirect impact on the cost of stock.

Keywords: *Information asymmetry, earnings quality, Cost of Equity, companies.*

Introduction

Businesses must grow to survive and maintain their competitiveness in the face of fiercer competition (Sutarman et al., 2022). This growth entails product innovation, product differentiation, and corporate development, all of which eventually result in a greater requirement for capital. As a result, other parties with the financial means—such as debtors or investors—are needed. Sasongko et al. (2016) state that for businesses to continue operating, they need money from investors and lenders, which they can get by issuing stocks or bonds sold on the capital market.

A vital communication component is financial reporting, which gives stakeholders both internally and externally the information they need. Financial reports are regarded as a representation of a company's success and are used as a resource by interested parties when making decisions, particularly when it comes to profit information (Gondokusumo and Susanti, 2022). Financial reporting serves the additional function of giving report readers information to aid in their interpretation of a company's economic activity. As a result, users consider financial data to be extremely important when making decisions. Profit is one of the components that financial reports contain. When reported earnings enable consumers of

financial reports to make well-informed judgments and accurately represent the financial performance, profit is deemed to be of high quality (Sari and Widodo, 2022).

The total accruals change measure can be used to gauge the quality of earnings. Earnings with little variations in total accruals are considered high-quality earnings. This statistic assumes that variations in discretionary accruals lead to variations in overall accruals. Agency disputes and earnings quality are inextricably linked in a business entity. According to Jensen and Meckling's agency theory (Jensen and Meckling, 2019), principals assign decision-making authority to management (agents). As a result, management, acting as the company's stewards, has greater access to internal data and business opportunities than do principals. Asymmetry in information results from this circumstance. When there is an imbalance in the amount of information between the parties—that is, when one has more knowledge than the other—managers are encouraged to use earnings management techniques.

Management efforts to increase or decrease earnings are referred to as earnings management. This includes income smoothing to conform to management's preferences. Numerous scholars have studied how the quality of profits affects the cost of equity. After looking at the direct relationship between the cost of equity capital and earnings quality, as measured by earnings management, Triningtyas et al. concluded that the two variables are highly correlated (Yolanda and Mulyani, 2019). Wulandari et al.'s research, however, has shown that the cost of equity is not greatly impacted by the quality of earnings (Putri and Azzahra, 2021).

The paucity of empirical research on the relationship between earnings quality and the cost of equity with asymmetric knowledge acting as an intervening variable is the driving force behind this study's investigation (Hani et al., 2017). Prior research has mostly examined how company governance and financial reporting levels relate to information asymmetry and the cost of equity. There is a research deficit on this topic, which is another

reason for conducting this study. This study aims to ascertain the effect of earnings quality on equity costs and explore the relationship between earnings quality and equity costs using asymmetric information as an intervening variable.

Methods

The goal of associative research, the research methodology employed in this study, is to investigate correlations between two or more variables. The study used official data and concentrated on some Palestinian companies between 2020 and 2022. Manufacturing businesses in the consumer products sector within the given 2020–2022 timeframe make up the research population.

Purposive sampling, a non-probability sampling method where sample selection is based on particular considerations or criteria adapted to the research aims, is the sampling strategy employed in this study [25]. The following are the criteria applied in the present study:

1. Manufacturing companies in the consumer products sector routinely release yearly financial reports.
2. Manufacturing companies in the consumer products sector with accessible stock price information, bid and ask prices for their shares.

A sample of 20 manufacturing companies operating in the consumer products industrial sector between 2020 and 2022 was gathered based on these parameters. This study employed secondary data for its data collection. Financial reports released by manufacturing companies in the consumer goods industry sector served as the secondary data source for this study.

Test the hypothesis

Path analysis was used in this study's hypothesis testing. One direct influence parameter (p_1) is the first research hypothesis (H1) on how earnings quality affects equity

cost. In the meantime, indirect effect factors (p2 and p3) are represented by the second study hypothesis (H2), which attempts to investigate the impact of earnings quality on equity cost using asymmetric information as an intervening variable.

Statistical analysis

For the statistical analysis, R cran was used to analyze data in this study. In this study, descriptive statistics were used to provide explanations of the observed research variables. The Kolmogorov-Smirnov test was used to determine the normality of the data. The autocorrelation testing was applied using the Durbin-Watson (DW-test). When applying the Durbin-Watson test for first-order autocorrelation, the regression model must have an intercept, or constant, between the independent variables and no extraneous variables. Also, the Glesjer test was applied to assess heteroskedasticity at a significance level of 5%. Heteroskedasticity was shown in a regression model if the independent variables had a significant impact on the dependent variable. The variance inflation factor (VIF) and tolerance values were used to identify multicollinearity.

In addition, the coefficient of determination test was used in this study. The purpose of the coefficient of determination test is to evaluate how well independent variables in the study can account for variations in dependent variables. A lower Adjusted R-squared value indicated that the independent factors' capacity to explain the dependent variable is diminished. This gives you an idea of how well the model explains the phenomenon you saw in your research. Regression errors in path analysis are represented as ϵ_1 for the first regression and ϵ_2 for the second regression. For every regression, ϵ was computed using this equation

$$R\text{-squared}\epsilon = \sqrt{(1-R^2)}.$$

The percentage of variation in the dependent variable that the independent variables are unable to explain was shown by regression errors.

Results and discussion

Table 1 presents the findings from the descriptive statistical analyses of 20 manufacturing firms in the consumer goods companies sector for the 2020–2022 period.

Table 1. Descriptive statistics of Discretionary Accruals (DA)

Descriptive statistics	DA			AI			PER		
	2020	2021	2022	2020	2021	2022	2020	2021	2022
Min	-0.11	-0.42	0.00	0.00	0.01	-0.43	-131.13	-5629.15	-196.33
Max	0.40	0.57	172.47	154.60	178.13	0.18	2109.03	643351.72	436.83
Mean	-0.02	-0.02	52.36	80.31	69.32	-0.11	78.21	15433.75	34.68
SD	0.15	0.22	31.62	32.46	47.67	0.17	308.16	94271.71	90.88

According to the data presented in Table 1, the mean values of DA were -0.02 (0.15), -0.02 (0.22), and 52.36 (31.62) in 2020, 2021, and 2022 respectively. In addition, the mean values of AI were 80.31 (32.46), 69.32 (47.67), and -0.11 (0.17) in 2020, 2021, and 2022 respectively. For PER, the results showed that the mean values were 78.21 (308.16), 15433.75

(94271.71), and 34.68 (90.88) in 2020, 2021, and 2022 respectively.

Classical Assumption Test Results

Findings from the descriptive statistical analysis of 20 manufacturing firms in the consumer goods sector that were registered on the IDX for the 2020–2022 timeframe. It was

observed that the findings of the normality test, after removing outlier values, reduced the initial number of observations from 98 to 71. The p-value for equation 1 was 0.915 and 0.401 for equation 2. The normality test results revealed that the values were more than 0.05, which indicated that the data had a normal distribution.

Table 2 shows the findings of the Autocorrelation test which was done using

Durbin-Watson (DW). If the DW value is between du and $4-du$ ($du < d < 4-du$), the research model is deemed to be autocorrelation-free. Durbin-Watson test results show that the first equation's Durbin-Watson value is 2.047, whereas the second equation's Durbin-Watson value is 1.902. There is no autocorrelation in the study data because the DW values produced by both equations are more than the upper limit (du) in the DW table, which is 1.973 ($k=1, n=71$) and 1.219 ($k=2, n=71$), respectively.

Table 2. Normality Test Results

Information	Sig. (Normality)	Durbin-Watson	Sig. (Gletsjer)	Tolerance	VIF
Eq 1.	0.915	2.047	0.366	1.000	1.000
Eq 2.	0.401	1.902	0.704 0.795	1.000	1.000

Table 2 also illustrates the significance of the Glejser test. The first equation's significance values are 0.366, whereas the second equation's parameters two and three have values of 0.704 and 0.795, respectively. Since these values are greater than 5%, heteroskedasticity may not exist. The variance inflation factor (VIF) is 1.000, which is less than 10, and the tolerance value is 1.000, which is larger than 0.10, according to the multicollinearity test results.

Therefore, it can be said that multicollinearity does not exist.

The findings can be utilized to address the study hypotheses based on the data analysis that was done. The significant values in this study serve as the foundation for hypothesis testing. If the significance values are less than 0.05, the study hypotheses are deemed acceptable. The following are the findings from the hypothesis testing conducted for this study:

Table 3. Test Results of Path Analysis

Information	Beta	T	Sig.	Adjusted R Square
Eq 1.	-0.001	-0.028	0.891	-0.020
	-0.024	-0.392	0.609	-0.021
Eq 2.	0.036	0.447	0.557	

According to table 4, the path analysis equation applied in this study as follows:

$$\epsilon_1 = \sqrt{(1 - (-0,020))} = 1$$

$$\epsilon_2 = \sqrt{(1 - (-0,021))} = 1$$

$$AI = -0,001KL + 1$$

$$BE = -0,024 + 0,036AI + 1$$

Given that the significance value in path p_1 is larger than 0.05, particularly 0.609, it is evident from the path analysis results above that the quality of earnings has no discernible impact on the cost of equity. Path p_2 indicates that there is

no significant relationship between earnings quality and information asymmetry because the significance value (0.891) is larger than 0.05. Similarly, path p3's significance value of 0.557, which is bigger than 0.05, suggests that information asymmetry has no discernible impact on the cost of equity.

The second hypothesis, which is supported by the preceding table, contends that there is no evidence of a significant relationship between earnings quality and information asymmetry, as the significance level is higher than 0.05. Furthermore, the impact of information asymmetry on equity costs has a significant value of 0.557, which is also higher than 0.05. This suggests that information asymmetry, as an intervening variable, has no indirect impact on the relationship between the cost of stock and the quality of earnings. Therefore, because there is insufficient empirical data to support the study hypothesis, which contends that information asymmetry mediates the impact of earnings quality on the cost of equity, it is rejected.

The magnitude of the direct influence = -0.024

The magnitude of the indirect influence = $(-0.001 \times 0.036) = -0.000036$

The total influence of earnings quality on equity cost = -0.024036

Earnings Quality to Cost of Equity

The path analysis's findings show that the cost of equity and the variable measuring earnings quality do not significantly affect one another. This result refutes the earlier theory, which held that the cost of stock is negatively impacted by earnings quality. The considerable variance (range of values) in the cost of equity between various periods, as evidenced by the cost of equity standard deviation being above the average value, can be linked to the lack of a major influence of earnings quality on the cost of equity.

In addition, the majority of the study's results on earnings quality were negative, indicating accrual deviations made by management to lower the company's reported earnings (income minimization). This suggests that the

companies under investigation have low-quality earnings. Additionally, the majority of the cost of equity data in this study, which was estimated using the price-earnings ratio, had high values (low cost of equity).

The study's statistics do not support the current paradigm, which holds that a low quality of earnings should translate into a high cost of equity. On the other hand, the evidence suggests that low profits quality also translates into cheap equity costs. The conclusion that follows from this disparity is that the cost of stock is not greatly impacted by earnings quality. The path analysis results indicate that the earnings quality variable has no discernible impact on the cost of equity (cost of equity) with information asymmetry acting as an intervening variable. This is about the influence of earnings quality on the cost of equity. The aforementioned hypothesis, according to which information asymmetry acts as an intervening variable and influences earnings quality and the cost of equity, is not supported by this study.

The findings of this study contradict the theory of Jensen & Meckling (2019). According to agency theory, everyone acts in their own best interests. Principals want to increase financial results, and agents want rewards and pay for fulfilling certain requirements related to the agent-principal relationship. Due to agency conflicts brought on by these competing interests, agents and principals may get information that is asymmetrical or imbalanced (Andalawestyas and Ariyati, 2019). Lower profit quality may arise from agency conflicts that give rise to opportunistic managerial actions. Decreased earnings quality can lead to users—like creditors and investors—making poor decisions, which lowers the value of the company (Kusumah et al., 2021). The lack of influence implies that investor expectations of earnings management have an impact on the quality of results on the cost of equity through information asymmetry (Dewi and Chandra, 2016) Additionally, while making investment selections, investors take into account a variety of elements in addition to the results of financial statements, particularly the income statement.

Conclusion

With information asymmetry acting as an intervening variable, this study sought to determine the direct and indirect effects of earnings quality on the cost of equity in manufacturing companies within the consumer goods sector between 2020 and 2022. Numerous inferences can be made in light of the test results that were performed. First off, the cost of equity is not much impacted by the profit quality variable. Second, when information asymmetry is taken into account as an intervening variable, earnings quality has no discernible effect on the cost of equity. It is advised that a larger sample be used in future studies, not just manufacturing firms in the consumer goods industry. This would give the study's conclusions a wider range of applications. To look at the most recent financial comparisons and broaden the population, which can lessen sample bias, it is also advised to use a longer and more recent observation period.

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