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FACTORS AFFECTING CASH HOLDING ON PROPERTY AND REAL ESTATE COMPANIES

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ABSTRACT

The purpose of this research is to obtain empirical evidence regarding the influence of financial distress, inflation, institutional ownership, leverage, and firm size on cash holding in property & real estate companies listed on the Indonesia Stock Exchange in 2020 to 2022 period. The sample in this research is 87 samples. with a period of 3 years which has been selected using purposive sampling, certain criteria, and data outlier. This research was proceeded using Microsoft Excel 2019 and Eviews 12 software. The results of this research show that financial distress, institutional ownership, and firm size have a positive effect on cash holding. However, the results found for the variables consist of inflation and leverage have no effects on cash holding.

Keywords: *cash holding, financial distress, inflation, institutional ownership, firm size*

1. INTRODUCTION

One of the objectives of an entity in carrying out its business activities is to generate profit. In order to achieve the expected profit, companies are required to utilize cash as an instrument to obtain the anticipated gains, while simultaneously avoiding the risk of financial difficulties that could haunt every company. Additionally, entities need to consider the optimal cash level that should be retained within a company, following a funding strategy in accordance with the pecking order theory. Oversight by institutional parties is also predicted to be a management consideration for retaining cash within an entity. When there is substantial oversight by institutional parties, the empowerment of cash allocated to operational activities and investment activities becomes more effective. Institutional ownership has a positive impact on cash holding, and this finding is based on research presented by Jiang, Li and Li, (2022). External influences also contribute to the level of cash retained within the entity. The external influence referred to is the inflation rate.

Inflation signifies the weakening of purchasing power among the public due to rising prices of necessities and scarcity of raw materials. The property and real estate sectors are vulnerable to inflation and interest rates because these types of companies have long business cycles involving the purchase of raw materials to the formation of finished buildings (Jones *et al.*, 2008). The ability of companies to purchase raw materials weakens as inflation increases. Nevertheless, the ability of the public to purchase properties also weakens, leading to a decrease in company sales and the amount of cash received (Sari, Kurniawati and Wulandari, 2019). Inflation has a negative impact on cash holding (Ki and Adhikari, 2022). The company's access to the capital market provides ease for a company to obtain external funding. When the cost of borrowing is higher than the cost of holding cash, companies tend to choose the option of holding cash (Sari, Kurniawati and Wulandari, 2019). The consideration of a company in choosing external funding to carry out its investment activities can enhance a company's profits because if the company uses this funding to purchase assets,

those assets can generate income and increase the amount of a company's assets (Alicia et al., 2020). Leverage has a negative impact on cash holding (Yudaruddin, 2019; Ki and Adhikari, 2022; Oktafiana and Hidayat, 2022; Romel and Ekadjaja, 2023)

The size of a company influences the company's consideration to retain cash within the company; larger companies tend to have smaller cash reserves because they have access to the capital market and can easily obtain debt (Yudaruddin, 2019). However, the size of the company is not an absolute measure of the amount of cash retained by the company, as companies still require a significant amount of cash to carry out their operational activities. Firm size has a positive impact on cash holding (Alicia *et al.*, 2020).

The aim of this research is to obtain empirical evidence regarding the influence of financial distress, inflation, institutional ownership, leverage, and firm size on cash holding. The benefits derived include the realization of knowledge acquired by the researcher during their academic studies, with the hope that this journal contributes to the understanding of accounting and economic knowledge for students, the public, and the educational community.

2. RESEARCH METHOD

Signaling Theory

Signal theory is a theory that explains the performance results of an entity in meeting investors' desires through signaling (Liestyasih and Wiagustini, 2017). Additionally, signal theory emphasizes providing good signals to investors through effective earnings management, indicating that the information asymmetry between management and stakeholders in the entity is small or insignificant, enabling investors to differentiate between entities with good and poor performance (Ekasari Harmadji et al., 2018).

Trade Off Theory

The Trade Off theory elucidates that the value of a company can be maximized when the increase in profits from holding cash equals the additional cost of holding cash (Bangun, Natsir and Ngadiman Ngadiman, 2023). There are two transaction motives focused on the trade-off theory, the first motive being transaction cost motive, which refers to the benefit a company gains by holding cash to reduce transaction costs without liquidating assets for payments, the second motive being precautionary motive, which pertains to funding company activities; if a company lacks external funding sources, it can fund financing activities using internal company funds (Guizani, 2017).

The Correlation Between Variables

Financial Distress and Cash Holding

Financial difficulties faced by a company result in the company being on the brink of bankruptcy. These companies are unable to generate profits through their operational activities and are unable to repay their debts, leading the company from initially experiencing mild difficulties to ultimately facing bankruptcy (Bangun, Natsir and Ngadiman Ngadiman, 2023). The correlation between financial distress and cash holding is consistent with the Trade-Off Theory, which advocates for maintaining optimal cash reserves within a company to fund its activities and avoid financial hardship (Guizani, 2017).

Inflation and Cash Holding

Inflation, indicating the increasing prices of basic necessities and the weakening purchasing power of the public, affects cash holding within entities. According to the calculations and analysis presented by Ki and Adhikari, (2022), it is stated that inflation has a negative impact on cash holding, thereby validating the accuracy of the trade-off theory and pecking order theory, which suggest that a company evaluates the benefits and drawbacks of holding cash while determining the optimal level of cash holding. Inflation aligns with the Trade-Off Theory, which posits that there is no optimal cash level, leading companies to maintain cash reserves for investment needs. Consequently, irrespective of macroeconomic conditions such as inflation rates, companies will continue to hold cash.

Institutional Ownership and Cash Holding

In companies with strong institutional ownership, it affects the factor of the amount of cash held. Research findings on the influence of institutional ownership on cash holding, as proposed by Ridha, Wahyuni and Sari, (2019), lead to the conclusion that institutional ownership has a negative impact on cash holding. This is because external oversight increases performance, requiring management to be transparent about the information provided to shareholders. This reality results in a decrease in the amount of cash held when there is an increase in institutional ownership. Institutional ownership aligns with the Trade-off Theory, which explains the contrasting influence between institutional oversight and the amount of cash held within an entity.

Leverage and Cash Holding

A high level of leverage in a firm indicates that the firm is able to easily obtain funding from external sources, leading the company to have a tendency to hold a small amount of cash. This argument is supported by research findings from Ki & Adhikari (2022), Oktafiana and Hidayat, (2022), Romel and Ekadjaja, (2023), and Yudaruddin (2019), which produce research data and analysis showing that leverage has a negative impact on cash holding. The leverage variable aligns with the trade-off theory, which explains the contrasting relationship between increasing debt ratios and the amount of cash held within a company.

Firm Size and Cash Holding

The size of a company can be evidenced by the amount of assets controlled by the firm. Large companies/firms have a greater number of assets compared to small companies, and a larger amount of assets correlates with the cash and cash equivalents held by the entity. Based on the testing and calculations obtained by Alicia et al., (2020), it is stated that the size of the company signals a positive influence on cash holding and validates previous statements. The theory supporting the influence of firm size on cash holding is the Signaling Theory, which explains that large companies signal to investors regarding their performance and the amount of assets within the entity (Liestyasih and Wiagustini, 2017).

Research Framework

The research framework interpreted as described below.

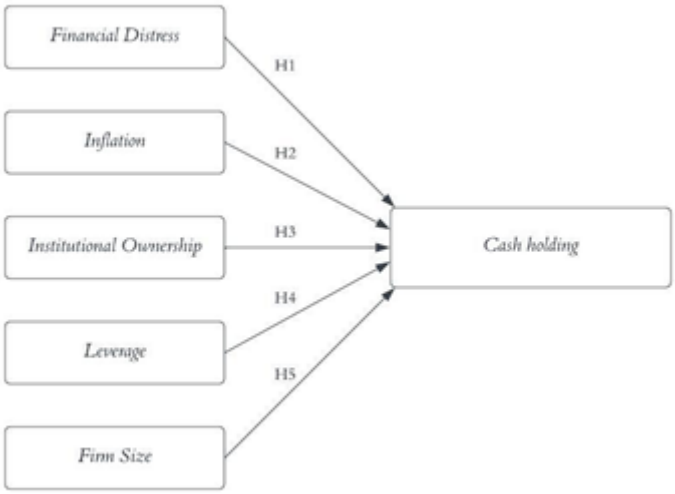

Figure 1. Research Framework

Research Hypothesis

The financial difficulties faced by a company result in the company being on the brink of bankruptcy. These companies are unable to generate profits through their operational activities and are unable to repay their debts, leading from initially mild financial struggles to eventual bankruptcy (Bangun, Natsir and Ngadiman Ngadiman, 2023). H1: Financial distress has negative and significant effect on cash holding

Inflation, indicating an increase in the prices of essential goods and a weakening of purchasing power among the public, influences cash holding within entities. This is evident in the calculation and analysis results presented by Ki and Adhikari, (2022) it is stated that inflation has a negative impact on cash holding, thereby validating the accuracy of the trade-off theory and the pecking order theory, wherein a company evaluates the benefits and drawbacks of holding cash while determining the optimal level of cash holding. H2: Inflation has negative and significant impact effect on cash holding

In companies with a strong institutional ownership, it significantly influences the amount of cash held. The research findings regarding the impact of institutional ownership on cash holding presented by (Ridha, Wahyuni and Sari, 2019) yield a conclusion that institutional ownership has a negative impact on cash holding, as external oversight enhances performance, demanding management transparency in the information conveyed to shareholders. This reality leads to a decrease in the amount of cash held when institutional ownership increases. H3: Institutional ownership has negative and significant effect on cash holding

A high level of leverage in a firm indicates that the firm is able to easily obtain funding from external sources, leading the company to tend to hold a smaller amount of cash. This argument is supported by research findings by Yudaruddin, (2019); Ki and Adhikari, (2022); Oktafiana and Hidayat, (2022); Romel and Ekadjaja, (2023) resulting in research data, test

results, and analysis indicating that leverage has a negative impact on cash holding. H4: Leverage has negative and significant effect on cash holding

The size of a company can be evidenced by the amount of assets controlled by the firm. Large companies have more assets compared to small companies, and a higher number of assets correlates with the cash and cash equivalents held by the entity. Conclusions based on testing and calculations obtained by Alicia *et al.*, (2020) it is stated that the size of the company signals a positive influence on cash holding and validates the previous statement. H5: Firm size has negative and significant effect on cash holding

Population and Sampling Techniques

The population in this study is limited to companies in the property and real estate sectors that are listed and have undergone IPO on the Indonesia Stock Exchange before the years 2020-2022. The sampling method employed to obtain research samples applies non-random sampling, namely purposive sampling. Purposive sampling utilizes a sampling technique by obtaining data through parties with authority over the data or parties with proportional data based on predetermined criteria (Sekaran & Bougie, 2016). The selection criteria for samples in this study include several categories, namely: A. Property & real estate companies listed on the Indonesia Stock Exchange during the period 2020-2022. B. Property & real estate companies that have conducted IPOs before the year 2020. C. Property & real estate companies that present financial statements or annual reports as of December 31st. Institutions that hold shares in property & real estate companies listed on the Indonesia Stock Exchange during the period 2020-2022.

Variables and Measurement Methods

Table 1. Variabel Operationalization

Variable	Indicator	Scale
Cash Holding	$\text{CH} = \frac{\text{Cash and Cash equivalents}}{\text{Total Assets}}$	Ratio
Financial Distress	$\text{Z} = 0.012\text{X1} + 0.014\text{X2} + 0.033\text{X3} + 0.006\text{X4} + 0.999\text{X5}$	Ratio
Inflation	$\text{IR} = \frac{\text{Sum of inflation rate (\%) per month}}{12}$	Ratio
Institutional Ownership	$\text{IO} = \frac{\text{Total shares owned by institution}}{\text{Outstanding shares}}$	Ratio
Leverage	$\text{DAR} = \frac{\text{Total Liabilities}}{\text{Total Assets}}$	Ratio
Firm Size	$\text{SIZE} = \text{Ln (Total Assets)}$	Ratio

3. RESULTS AND DISCUSSIONS

Descriptive Statistics

The results of descriptive statistical test on cash holding shows mean value of 0.025026, median value 0.0163, maximum value 0.09386 obtained by Lippo Karawaci Tbk. in 2021, minimum value 0.00005 obtained from Bhakti Agung Propertindo Tbk. in 2022, and standard deviation 0.022032.

The mean value of financial distress, as indicated by the Z-score, is 0.118356, the median financial distress value is 0.1065. The maximum financial distress value is 0.3286, obtained from Maha Properti Indonesia Tbk. in 2022, the minimum financial distress value is 0.0022, obtained from Kota Satu Properti Tbk. in 2022, and the standard deviation of financial distress is 0.079326

Inflation, denoted by IR, has a mean value of 0.026033, the median inflation value is 0.0204. The maximum inflation value is 0.0421 in 2022, indicating the highest inflation rate during the research period. The minimum inflation value is 0.0156, indicating the lowest inflation rate in 2021. The standard deviation of inflation is 0.011595

Institutional ownership has a mean value of 0.610154, the median institutional ownership value is 0.6571. The maximum institutional ownership value is 0.9775, obtained from Indonesian Paradise Property Tbk. from 2020 to 2022. The minimum institutional ownership value is 0.0512, obtained from Bakrieland Development Tbk. in 2020 and 2021. The standard deviation of institutional ownership is 0.229183.

The mean value of leverage is 0.40989, The median leverage value is 0.3744. the maximum leverage value is 1.1593 in 2022, obtained from Bliss Property Indonesia Tbk., the minimum leverage value is 0.0191, obtained from Agung Semesta Sejahtera Tbk. in 2022. The standard deviation of leverage is 0.23395

The mean value of firm size is 28.69096, the median firm size value is 28.52880. The maximum firm size value is 31.58380 in 2021, obtained from Lippo Karawaci Tbk., the minimum firm size value is 25.63180, obtained from Bekasi Asri Pemula Tbk. in 2022, The standard deviation of firm size is 1.507272.

	CASH	Z	IR	IO	DAR	SIZE
Mean	0.025024	0.118356	0.026033	0.610154	0.409890	28.69096
Median	0.016300	0.106500	0.020400	0.657100	0.374400	28.52880
Maximum	0.093900	0.328600	0.042100	0.977500	1.159300	31.58380
Minimum	0.000000	0.002200	0.015600	0.051200	0.019100	25.63180
Std. Dev.	0.022039	0.079326	0.011595	0.229183	0.233952	1.507272
Skewness	1.126694	0.793643	0.616287	-0.521405	0.525135	0.029331
Kurtosis	3.545363	2.977019	1.500000	2.642636	3.267329	2.024121
Jarque-Bera	19.48503	9.135028	13.66350	4.404953	4.257678	3.464707
Probability	0.000059	0.010384	0.001079	0.110529	0.118975	0.176868
Sum	2.177100	10.29700	2.264900	53.08340	35.66040	2496.113
SumSq. Dev.	0.041771	0.541160	0.011563	4.517134	4.707104	195.3807
Observations	87	87	87	87	87	87

Figure 2. Descriptive Statistics

Heteroskedasticity Test

Based on the heteroskedasticity test using the Breusch-Pagan-Godfrey model, the F probability value is 0.1236. So, based on the value of 0.1236 is greater than 0.05, thus passing the heteroskedasticity test in the Breusch-Pagan-Godfrey model.

Normality Test
The results of the normality test yield a Jarque-Bera probability value of 0.063751, which is greater than 0.05. It can be deduced that the data utilized in the normality calculation process are normally distributed, thus validating the assumption of normality for the regression model used.

Multicollinearity Test
The examination results of the correlation between independent variables consisting of financial distress, inflation, institutional ownership, leverage, and firm size yield correlation values below 0.8, thus concluding that the multicollinearity test has been passed.

Autocorellation Test
The Durbin-Watson score or DW score obtained is 2.174982, whereas the score obtained from the Durbin-Watson table, or DU table, is 1.7485. Based on the criteria established for the Durbin-Watson autocorrelation test, which is DU < DW < 4 - DU, an equation is derived as 1.7485 < 2.1745 < 2.2515. The DW value obtained lies in between, exceeding the DU table value and being less than 4 - DU. Based on the calculated Durbin-Watson scores, it is concluded that the data used in this study satisfies the classical assumption of autocorrelation.

Multiple Linear Regression Test
Multiple linear regression analysis used in this study has the following equation:

$$CH_{it} = \alpha + \beta_1 Z_{it} + \beta_2 IR_{it} + \beta_3 IO_{it} + \beta_4 DAR_{it} + \beta_5 SIZE_{it} + e$$

Explanation:

CH	: Cash Holding
β0	: Constant
β1, β2, β3, β4, β5	: Regression coefficients
i	: Entity i
t	: Period t
Z	: Financial Distress
IR	: Inflation Rate
IO	: Institutional Ownership
DAR	: Leverage
Size	: Firm Size
E	: Error

F Test
The output value produced yields a probability value (F-statistic) of 0.000001. This figure is smaller than 0.05, indicating that the independent variables consisting of financial distress, inflation, institutional ownership, leverage, and firm size are concluded to have a simultaneous effect on the dependent variable, namely cash holding.

T Test
The first independent variabel which is financial distress has the regression coefficient value is 0.101910, and the probability value is 0.0005, which is smaller than 0.05. Based on these values, it can be concluded that financial distress has a significant positive effect on cash holding. The variable inflation yields a coefficient value of -0.209520 and a probability value of 0.0570, which is greater than 0.05. It can be verified from these results that the inflation variable does not have a partial effect on cash holding. The variable institutional ownership can be verified by the regression coefficient value of 0.026523 and the probability value of 0.0155. Both results indicate that institutional ownership has a significant positive effect on cash holding. The variable leverage, through t-testing, yields a regression coefficient value of

-0.005344 with a probability value that is excessively high at 0.6250. This result indicates that leverage as an independent variable does not have a significant effect on the variable cash holding. The variable Firm size as an independent variable in partial testing yields a regression coefficient value of 0.005904 along with a probability value of 0.0016. Both results interpret that Firm size actually has a positive and significant effect on cash holding.

Adjusted R-Square Test

The calculation of the determination coefficient yields a figure of 0.318834 or 31.9%. Based on the calculated result shown above, it is concluded that the independent variables consisting of financial distress, inflation, institutional ownership, leverage, and firm size have the ability to explain 31.9% of the variation in cash holding. The remaining percentage, which is 68.1%, represents other variables that explain cash holding beyond the scope of this study.

4. CONCLUSIONS AND SUGGESTIONS

This research aims to generate empirical or theoretical evidence regarding the influence of independent variables, including financial distress, inflation, institutional ownership, leverage, and firm size, on the dependent variable, namely cash holding. The sector of companies applied in this study is the property and real estate sector listed on the Indonesia Stock Exchange during the period from 2020 to 2022. The sampling technique employed in this research utilizes non-probability sampling, followed by the implementation of data collection methods, namely purposive sampling. After eliminating and addressing outliers, a total of 29 companies were sampled within the three-year research period. The overall number of samples used in this study is 87. The data processing involved in the calculation process utilized Microsoft Excel 2019, while data analysis and conclusion drawing processes were carried out using Eviews (Econometric views) 12 software.

In the first independent variable, financial distress, it was found that financial distress has a positive effect on cash holding, whereby lower financial distress scores lead to decreased cash holding. This research finding aligns with Yudaruddin's study (2019), which states that financial distress positively affects cash holding. However, this result contradicts Bangun et al.'s research (2023), which suggests that financial distress significantly negatively impacts cash holding. Regarding the second variable, inflation, the result indicates that inflation does not affect cash holding. This lack of influence can be attributed to companies still needing cash to carry out their activities, regardless of the current inflation rate. This result contradicts various previous studies, as some have shown that inflation negatively affects cash holding (Ki & Adhikari, 2022), while others indicate a positive influence (Das, Hasan and Sutradhar, 2023). The third independent variable, institutional ownership, yields the conclusion that institutional ownership has a positive impact on cash holding.

This suggests that institutional ownership, through oversight, increases a company's cash holding value. This finding aligns with Jiang, Li and Li, (2022), which suggests a positive effect of institutional ownership on cash holding. However, it contradicts Ridha, Wahyuni and Sari, (2019) research, which suggests a negative impact, as well as Ikhsani, Gurendrawati and Nasution, (2022) research, which indicates no effect. Regarding leverage, it was found that leverage does not affect cash holding. This lack of impact can be attributed to companies preferring to use internal funds as a source of financing rather than external sources. This statement is consistent with the pecking order theory, which outlines the financing hierarchy within a company. This finding aligns with Sari et al.'s study (2019), which states that leverage does not affect cash holding. However, it contradicts Alicia et al.'s research (2020),

which suggests a positive effect, as well as several other studies (Ki & Adhikari, 2022; Oktafiana & Hidayat, 2022; Romel & Ekadjaja, 2023; Yudaruddin, 2019), which indicate a negative impact. The last independent variable, firm size, yielded research findings indicating that firm size has a positive impact on cash holding. Based on these results, it can be concluded that larger companies hold more cash and cash equivalents compared to smaller ones. This conclusion is solely based on a company's size. This result aligns with Alicia et al.'s study (2020), which suggests a positive effect of firm size on cash holding. However, it contradicts studies by Ki & Adhikari (2022) and Ridha et al. (2019), which suggest a negative impact. Additionally, it does not align with studies by Oktafiana & Hidayat (2022), Romel & Ekadjaja (2023), and Yudaruddin (2019).

Throughout the entire process of composing this journal, there are various limitations that are suggested to be taken into consideration for future research. The limitations/constraints found in this study include: (1) the independent variables applied in this research are limited to 5 variables consisting of financial distress, inflation, institutional ownership, leverage, and firm size with an adjusted R-square result of only 31.9%, indicating that approximately 68.1% of other variables influence cash holding; (2) The research sample in this study only encompasses property and real estate companies listed on the Indonesia Stock Exchange (IDX); (3) The research period is limited to only 3 years from 2020 to 2022.

Based on various limitations outlined above, it is hoped that future research can develop additional variables or utilize other variables that have the probability to influence cash holding. Additionally, it is expected that future studies can explore different entity sectors, thereby yielding more varied results regarding the impact of each variable on cash holding. Moreover, the research period could be more extensive so that the data from testing and analysis accurately depict the existing conditions and realities.

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