DETERMINANTS OF FINANCIAL DISTRESS: REVIEW OF THE ASPECTS OF PROFITABILITY, LIQUIDITY, LEVERAGE, AND ACTIVITY

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Abstract: This research aims to determine the determinants of financial distress in wholesale and retail trade subsector companies listed on the Indonesian Stock Exchange. In this research, financial distress is measured by Zscore, profitability is measured by Return on Assets, liquidity is measured by Current Assets, Debt measures leverage to Assets Ratio, and Total Assets Turnover measures activity. The research methods used in this research are descriptive and verification methods. The sample for this research was 29 companies obtained based on a purposive sampling technique with a five-year research period of 5 years, so the observation data totalled 145. The statistical analysis used is a linear regression analysis of panel data with time lag using the Eviews 10—Tektik program panel data linear regression estimation using the Fixed Effect Model. The coefficient test results show that profitability hurts financial distress, liquidity does not affect financial distress, leverage hurts negatively, and activity positively affects financial distress.

Keywords: Determinants, financial distress, Profitability, liquidity, leverage, activity.

INTRODUCTION

Indonesia is a country that has a level of economic growth that still depends on the consumption sector. This can be a driving force for the trade sector in Indonesia. The trade sector plays a role in meeting people's basic needs, supporting the smooth distribution of the flow of goods and services, and encouraging the formation of reasonable prices for goods. Trade development is significant in accelerating economic growth and equality, creating business opportunities, expanding employment opportunities and increasing income. Trade sector activities are interrelated and support each other with other sector activities, such as production, namely agriculture, industry and mining; financial sector; transportation sector and telecommunications sector. Trade development plays a vital role in maintaining economic stability, controlling inflation, and securing the balance of payments.

In the post-Covid-19 pandemic, Indonesian trade experienced several exciting phenomena. First, there has been a significant increase in export value, projected to reach USD 291.4 billion in 2023, representing an increase of 12.7% compared to the previous year. Factors such as global economic recovery, increasing demand for essential commodities such as coal, nickel, and palm oil, and diversification of export markets are the main drivers of solid export performance. Second, there has been a comparable increase in the value of imports, estimated to reach USD 283.4 billion in 2023, an increase of 13.4% compared to the previous year. This import increase was driven by domestic economic recovery and increased demand for raw materials and capital goods.

Furthermore, Indonesia is projected to experience a trade balance surplus of USD 8 billion in 2023, becoming the first trade surplus since 2019. However, Indonesian trade is also faced with several post-pandemic challenges, including the trade war between the United States and China, rising global energy prices, and global economic uncertainty. However, some opportunities can be exploited, such as increasing demand for halal products, economic growth in Southeast Asian countries, and implementing the Regional Comprehensive Economic Partnership (RCEP).

The domestic trade industry faces various problems; apart from weakening people's purchasing power, companies compete fiercely with online shopping outlets. A decline in people's purchasing power can impact declining company profits. Some trading companies have even closed their companies. A situation when a company cannot fulfil its obligations is an e-sign before the worst thing can happen, namely bankruptcy. Financial distress affects the company's financial system and the organization as a whole. On the Indonesian

Stock Exchange, PT Modern Sevel, which had become a trend among young people in 2013, had to close all its outlets on June 30 2017. This closure was preceded by problems since 2015; Sevel's income had decreased due to the weakening economic situation and competitiveness. High between minimarkets. This caused PT Modern Sevel to experience financial difficulties. This was followed by the company's failure to obtain additional capital to improve its performance following the cancellation of the acquisition plan by PT Charoen Pokphan Indonesia.

At PT Hero Supermarket Tbk is also experiencing company financial problems. This can be seen from the closure of several outlets in Indonesia. The closure of several outlets was carried out to ensure efficiency in the company's continuity. Store closures are not only carried out by PTHero SupermarketTbk. PT Matahari Putra Prima Tbk also did the same thing owner of Hypermart, Foodmart, Smart Club and Boston Health & Beaut outlets. PT Matahari Putra Prima Tbk. The outlet was closed for several reasons, including needing a profit and the end of the outlet rental period.

The decline in net income in each trading company above means that managers must immediately think critically about strategies to anticipate conditions that cause financial difficulties that might attack the company. Net income that continues to decline can cause profits to decline, leading to a decline in financial conditions. Company management must immediately take action to overcome the decline in financial conditions before bankruptcy occurs.

Based on the opinion of Fahmi (2015), financial distress is a stage of decline in financial conditions that occurs before bankruptcy occurs. Companies that are predicted to experience financial distress can be identified through Z-Score calculations. From the Z-Score calculation, it can be seen to what extent the company is healthy, whether it is in the safe zone (Z > 2.6), the grey zone (1.1 < Z > 2.6), or the dangerous zone (Z < 1.1). Every company that is in the grey zone means entering a vulnerable area. In this condition, companies begin to experience productivity and inefficiency problems, which impact financial distress and must be addressed quickly. Meanwhile, companies in the danger zone show they are increasingly entering the area of financial distress, approaching bankruptcy. Suppose a company with financial distress is not handled quickly and appropriately. In that case, the worst consequence that arises from the financial problems experienced by the company is that the company could be declared bankrupt by a court in the local country.

Insolvency/bankruptcy itself in Indonesia is regulated by law. No. 1 of 1998. This law states that debtors who have two or more creditors and cannot pay at least one overdue debt that cannot be collected are declared bankrupt by the decision of an authorized court, either at their own request or at the request of five or more creditors. The prosecutor's office can also submit this application in the public interest. Company bankruptcy will impact shareholders, employees and the national economy.

Shareholders who invest in companies experiencing financial distress will suffer losses because the dividends they receive will be reduced, or they will not even receive dividends. Therefore, investors avoid companies that are experiencing financial difficulties by looking at their financial ratios. For employees who work for companies experiencing financial distress, there will be a reduction in employees. This is done to minimize company costs. As previously explained, trade development plays a vital role in maintaining economic stability, controlling inflation and securing the balance of payments. Suppose many companies experience financial distress in Indonesia, followed by permanent bankruptcy. In that case, this will disrupt economic stability in controlling inflation and disrupt security in the balance of payments. Other impacts that can arise are reduced supply to fulfil people's basic needs, delays in the distribution of goods and services, and shortages and rising prices.

According to Sudana (2011), financial distress can be influenced by various factors, including economic factors, management errors and natural disasters. However, most of the causes, whether direct or indirect, are repeated management errors, especially in management that handles finances. According to Fahmi (2015), financial distress is a decline in financial conditions before bankruptcy occurs. This condition occurs when a company can no longer pay off its maturing obligations and debts.

Financial distress is the company's inability to pay its financial obligations when they are due, which can lead to bankruptcy. So, bankruptcy does not happen suddenly. Bankruptcy is an accumulation of continuous long-term mismanagement. Therefore, tools are needed to detect potential financial distress that a company may experience. Financial distress analysis is needed for early bankruptcy warning (Rudianto, 2013). Companies experiencing financial distress need predictions that will help management make decisions to improve the company's financial condition more quickly before bankruptcy occurs. External parties need predictions of financial distress before making investments or providing loans.

In 1968, Altman discovered that five financial ratios could be used to detect company bankruptcy two years before the company went bankrupt. The five ratios consist of cash flow to total debt, net income to total assets, total debt to total assets, working capital to total assets, and current ratio. Altman also found that specific ratios, especially liquidity and leverage, contributed the most to detecting and predicting corporate

bankruptcy. This Altman model is known as the Z-score, a method used to predict the possibility of bankruptcy that a company will experience by combining several financial ratios (Rudianto, 2013).

Financial ratios are a tool for analyzing a company's financial performance to determine whether the company is in a state of financial difficulty. According to Fahmi (2015), financial ratio analysis is a company performance analysis instrument that explains various financial relationships and indicators intended to show changes in financial conditions or operational achievements in the past and help describe the company's trend patterns to then show risks and opportunities and attached to the company concerned.

Financial ratio analysis can detect financial distress, which is used to measure a company's health (Fachrudin, 2008). Therefore, analysis of financial reports to determine the company's financial ratios is essential to determine its condition and whether the company experiences a decline or increase in its financial performance in each period. Through financial report analysis, it is possible to identify companies experiencing financial distress, hoping these conditions can be identified early.

Furthermore, management can make the right decisions so that the company can avoid financial distress, which can result in bankruptcy or bankruptcy. Companies predicted to experience financial distress can be influenced by several factors, one of which, according to Prihadi (2010), is that companies have profits that are not large or tend to be low. According to Sudana (2011), profitability is a ratio measuring a company's ability to generate profits using the company's resources. Therefore, the higher the profitability ratio, the higher the company's profit generation. This means that the company is increasingly protected from financial distress. However, the lower the company's profitability, the greater the possibility of the company experiencing financial distress.

Liquidity measures a company's ability to meet its short-term obligations. This ratio is important because failure to pay obligations can cause a company to go bankrupt. When the liquidity ratio value is high, the company can meet short-term obligations; conversely, if the liquidity ratio value is low, then the company is unable to meet short-term obligations. If the company has a low liquidity ratio, it will automatically experience financial difficulties (Fahmi, 2015).

According to Kasmir (2014), leverage is a ratio used to measure the extent to which company assets are financed with debt. Leverage is needed to measure the company's ability to pay debts (short-term and long-term). If a financing company uses more debt, there is a risk of payment difficulties in the future due to debt being more significant than the assets owned. If this situation cannot be adequately handled, the potential for financial distress will become even more significant (Hanifah & Purwanto, 2013). The beginning of bankruptcy usually begins with a moment of failure to pay because the greater the amount of debt, the higher the probability of financial distress. Companies with many creditors will move more quickly towards financial distress than companies with a single creditor.

Activities describe the creation of accurate operational performance of an entity. According to Rudianto (2013), the activity ratio measures a company's effectiveness in using its funding sources. The activity ratio is a ratio that measures a company's ability to manage its assets for the company's operational needs. Maximum use of the company's assets for operational activities can increase the company's production so that the company's sales and profits will increase. However, if the company cannot maximize the use of its assets, then the company's sales and profits will continue to decline. As a result, the possibility that the company may experience financial difficulties or the risk of financial distress is more significant.

RESEARCH METHODS

This research aims to determine the description of profitability, liquidity, leverage and activity and their influence on financial distress. Therefore, this type of research is included in quantitative research. According to Sugiyono (2017), quantitative research is a research method based on the philosophy of positivism, used to research specific populations or samples, collecting data using research instruments or statistics with the aim of testing predetermined hypotheses.

The population in this research is significant, and retail trade subsector companies are listed on the Indonesia Stock Exchange (BEI) for the 2018-2022 period. Sampling in this research was carried out using purposive sampling, namely a sampling technique with specific considerations. Purposive sampling obtains a representative sample according to the specified criteria (Sugiyono, 2017). The sample criteria are large and retail trade subsector companies listed on the Indonesia Stock Exchange during 2018-2022, companies that publish annual financial reports in Rupiah currency, and companies that publish financial reports on the IDX website that have been audited thoroughly and consecutively. From the 2018-2022 period. Based on the criteria above, 29 companies were obtained as samples in this research. So, the observation data in this study is 145 data taken from 29 companies sampled for 5 years.

The operational variables and calculation formulas in this research are as follows:
1) Profitability, using the formula (Sudana, 2011):

$Return\ On\ Assets = \dfrac{Earning\ After\ Tax}{Total\ Aset}$

2) Calculating Liquidity, using the formula(Sudana, 2011):

$Current\ Ratio = \dfrac{Current\ Assets}{Current\ Liabilities}$

3) Calculating Leverage, using the formula (Kasmir, 2014):

$Debt\ To\ Assets\ ratio = \dfrac{Total\ Debt}{Total\ Assets}$

4) Calculating Activities, using the formula (Prihadi, 2012):

$Total\ Assets\ Turnover\ Ratio: \dfrac{Sales}{Total\ Asset}$

5) Calculating financial distress, using the formula (Rudianto, 2013):

$Z = 6.56 + 3.26 + 6.27 + 1.05X_1X_2X_3X_4$

Information:

X_1=Working Capital / Total Assets

X_2=Retained Earnings / Total Assets

X_3= EBIT / Total Assets

X_4= Book Value of Equity / Book Value of Debt

Scorecompared with the following assessment standards:

Z > 2.6	= Safe Zone
1.1 < Z < 2.6	= Gray Zone
Z < 1.1	= Danger Zone

This research uses two different data, namely cross-section data and time series, called panel data research. Cross-section data is data obtained from several companies. Meanwhile, time series data is obtained from several periods with one subject. In this study, the research period was 5 years. So, the multiple regression analysis used is panel data multiple regression analysis.

RESEARCH RESULTS AND DISCUSSION
Selection of Panel Data Regression Estimation Techniques
Table 1. Panel Data Regression Test with Common Effect Model

Dependent Variable: ZSCORE
Method: Least Squares Panel
Date: 05/18/23 Time: 07:33
Sample (adjusted): 2018 202
Periods included: 5
Cross-sections included: 29
Total panel (balanced) observations: 145

Variables	Coefficient	Std. Error	t-Statistics	Prob.
C	4.487538	0.771880	5.813777	0.0000
ROA(-1)	12.18318	1.606060	7.585761	0.0000
CR(-1)	0.108794	0.061196	1.777794	0.0776
DAR(-1)	-5.247524	1.121835	-4.677625	0.0000
TATTOO(-1)	0.276283	0.212648	1.299247	0.1960

R-squared	0.472941	Mean dependent var	2.474447
Adjusted R-squared	0.457882	SD dependent var	3.565092
SE of regression	2.624930	Akaike info criterion	4.801860
Sum squared resid	964.6359	Schwarz criterion	4.904506
Log likelihood	-343.1348	Hannan-Quinn Criter.	4.843568
F-statistic	31.40619	Durbin-Watson stat	1.591675
Prob(F-statistic)	0.000000		

Source: Eviews 10 output

Table 2. Panel Data Regression Test with Fixed Effect Model

Dependent Variable: ZSCORE
Method: Least Squares Panel
Date: 05/18/23 Time: 07:34
Sample (adjusted): 2018 2022
Periods included: 5
Cross-sections included: 29
Total panel (balanced) observations: 145

Variables	Coefficient	Std. Error	t-Statistics	Prob.
C	0.715733	1.671223	0.428269	0.6693
ROA(-1)	5.217815	2.145112	2.432421	0.0166
CR(-1)	0.067518	0.062895	1.073506	0.2854
DAR(-1)	-4.309393	1.983475	-2.172648	0.0319
TATTOO(-1)	2.247364	0.647478	3.470949	0.0007

Effects Specification

Cross-section fixed (dummy variables)

R-squared	0.756066	Mean dependent var	2.474447
Adjusted R-squared	0.686370	SD dependent var	3.565092
SE of regression	1.996547	Akaike info criterion	4.417653
Sum squared resid	446.4542	Schwarz criterion	5.095116
Log likelihood	-287.2798	Hannan-Quinn Criter.	4.692929
F-statistic	10.84812	Durbin-Watson stat	2.217751
Prob(F-statistic)	0.000000		

Source: Eviews 10 output data

Table 3. Panel Data Regression Test with Random Effect Model

Dependent Variable: ZSCORE
Method: Panel EGLS (Cross-section random effects)
Date: 05/18/23 Time: 07:36
Sample (adjusted): 2018 2012
Periods included: 5
Cross-sections included: 29
Total panel (balanced) observations: 145
Swamy and Arora estimator of component variances

Variables	Coefficient	Std. Error	t-Statistics	Prob.
C	3.893020	0.894600	4.351691	0.0000
ROA(-1)	8.544498	1.593134	5.363325	0.0000
CR(-1)	0.083721	0.055552	1.507078	0.1340
DAR(-1)	-4.782362	1.253366	-3.815617	0.0002
TATTOO(-1)	0.544480	0.264247	2.060496	0.0412

Effects Specification

		elementary school	Rho
Random cross-section		1.278678	0.2909
Idiosyncratic random		1.996547	0.7091

Weighted Statistics

R-squared	0.345516	Mean dependent var	1.416667
Adjusted R-squared	0.326817	SD dependent var	2.658208
SE of regression	2.181000	Sum squared resid	665.9464
F-statistic	18.47725	Durbin-Watson stat	1.875000
Prob(F-statistic)	0.000000		

Unweighted Statistics			
R-squared	0.443518	Mean dependent var	2.474447
Sum squared resid	1018.486	Durbin-Watson stat	1.225986

Source: Eviews 10 output data

Final Method Selection for Panel Data Regression

Table 4. Chow test

Redundant Fixed Effects Tests
Equation: Untitled
Cross-section fixed effects test

Effects Test	Statistics	df	Prob.
Cross-section F	4.642641	(28,112)	0.0000
Chi-square cross-section	111.710000	28	0.0000

Source: Eviews 10 output data

Based on table 4, it shows that the p-value is 0.0000 where the p-value is <0.05. So it can be concluded that Ho is rejected, so the model chosen is the Fixed effect model.

Table 5. *Hausman test*

Correlated Random Effects - Hausman Test
Equation: Untitled
Cross-section random effects test

Test Summary	Chi-Sq. Statistics	Chi-Sq. df	Prob.
Random cross-section	31.063026	4	0.0000

Source: Eviews 10 output data

Based on Table 5, it can be seen that if the Hausman probability or p-value < 0.05, then H0 is rejected or H1 is accepted. This means that the model chosen is the Fixed Effect Model and is better than the Random Effect Model. From the Chow and Hausman Test, the Fixed Effect Model is chosen, so there is no need to carry out the LM Test. So, the Fixed Effect Model is the most appropriate model to use in this research.

Classic assumption test

Table 6. *Autocorrelation Test*

	Value		Value
DENOMY….	-596.4549	DHTEST	0.00000

Source: Eviews 10 output data

In table 6, the results of the autocorrelation test using Eviews 10 show a Durbin-Watson h-statistic (DHTEST) value of 0.0000. This means that the DHTEST value is in a position between -1.96 < 0.0000 < 1.96, so it can be concluded that there is no autocorrelation in the regression model.

Table 7. Multicollinearity Test

	ROA	CR	DAR	TATTOO

ROA	1,000000	0.048733	-0.260290	0.161187
CR	0.048733	1,000000	-0.278504	-0.036361
DAR	-0.260290	-0.278504	1,000000	0.140253
TATTOO	0.161187	-0.036361	0.140253	1,000000

Source: Eviews 10 output data

From table 7 it can be seen that the correlation coefficient between variables does not exceed 0.8, so it can be concluded that in this study there is no multicollinearity. This means that the variables profitability (ROA), liquidity (CR), leverage (DAR) and activity (TATO) are not related.

Table 8. Heteroscedasticity test

Heteroskedasticity Test: White

F-statistic	1.428667	Prob. F(4,140)	0.2276
Obs*R-squared	5.686639	Prob. Chi-Square(4)	0.2238
Scaled explained SS	48.75624	Prob. Chi-Square(4)	0.0000

Source: Eviews 10 output data

Based on table 8, it can be seen that the Obs*R-Square probability value is 0.2238, meaning > 0.05. So it can be concluded that in this study the regression model is homoscedastic or not heteroscedastic.

Panel Data Linear Regression Analysis
In this research, the panel data regression model used is the Fixed Effect Model using Eviews 10, listed in Table 2. Based on the processing results, the constant value (c) is 0.715733. For profitability, the ROA indicator positively affects the Zscore value with a coefficient value of 5.217815 and a significance level of 0.0166. Liquidity with the CR indicator positively affects the Zscore value with a coefficient value of 0.067518 and a significance level of 0.2854. Leverage with the DAR indicator hurts the Zscore value with a coefficient value of negative 4.30939 and a significance level of 0.0319. Activities with the TATO indicator positively affect the Zscore value with a coefficient value of 2.247364 and a significance level of 0.0007. The R-square value of this model is 0.756066, indicating that the independent variables influence 75.61% of financial distress in the model, while other variables explain the remaining 24.39%. So, the linear regression equation for multiple panel data can be formulated as follows:

$$Zscore = 0.715733 + (5.217815)ROA + (0.067518)CR - (4.30939)DAR + 2.247364(TATO)$$

Based on table 2, the calculated F value is 10.84812, while the F table value is 2.44, so the calculated F > F table and the probability value (F-statistics) is 0.0000 < 0.05. It means H_0 rejected and accepted. These results show that kH_1 All profitability, liquidity, leverage and activity variables influence financial distress.

DISCUSSION
Based on the results of the profitability analysis, the regression coefficient results are positive; the company's profitability increases by 1% so that the Zscore value will increase by 5.217815. Furthermore, profitability significantly negatively affects financial distress, so an increase or decrease in profitability can influence fluctuations in the company's financial distress condition. Companies that generate high profits will have more resources to run their business. The principal believes that the better the company's ability to generate profits, the higher the future profits will be obtained. Companies with high profits cause the company to have resources that can be used to fulfil the company's operational obligations and need so that the running of the business will be more secure, which will result in less financial distress for the company.
The results of this research support research conducted by Effendi and Haryanto (2016), which states that profitability has a positive effect on Zscore, meaning that profitability negatively affects financial distress. Companies that have low profits result in inappropriate resource allocation because company management cannot utilize company assets properly. So this is in line with the neoclassical model theory (Fachrudin, 2008), which states that financial distress occurs when resource allocation is inappropriate. Thus, inappropriate resource allocation will cause the value of profits to decrease further, and the company has a high potential to experience financial distress.
The research results show that liquidity does not affect financial distress. This means that the fluctuations in the company's liquidity cannot be used as an essential element in influencing the company's

financial distress. The results of this study do not support the initial hypothesis, which states that company liquidity hurts financial distress. Methodologically, liquidity does not affect financial distress because the data collected failed to prove the hypothesis. This is because there is extreme data on the CR values collected. So, there is no significant difference between the liquidity of companies experiencing financial distress and companies not experiencing financial distress. Companies with high liquidity values will not necessarily avoid financial distress, and companies with low liquidity will not always experience financial distress.

High liquidity does not necessarily guarantee that the company's debts will be paid when they are due. Financial distress in a company is not only determined by the high or low value of liquidity owned by the company. Many companies rely on company finances to pay their short-term obligations. If the company has sound finances, it will be careful in selling or disbursing its current assets to pay its obligations. The higher the liquidity value, the safer it is for creditors. However, it can mean something different for companies because they are focused on more than just liquidity. Companies that avoid financial distress must fulfil their short-term and long-term obligations. In this case, liquidity only calculates the company's ability to pay its short-term obligations. So, companies with high liquidity cannot reduce the risk of financial distress.

The research results show a positive relationship between leverage and financial distress. High company leverage occurs due to the company's high use of debt. So, the interest and principal on the loan will also be higher, reducing company profits. The high use of debt will create a risk of default because the company needs more resources from profits to pay. The higher the risk that will occur will indicate that the company has poor financial performance. As stated by Fahmi (2015), companies no longer have good financial balance because the company's ability to pay its debts on time is considered to be in a problematic position and even tends to no longer be on time (insolvable), so the company is increasingly unable to pay its debts. The debt will result in the company needing a better financial balance. So, many company obligations still need to be fulfilled, increasing the company's financial distress.

The research results show a significant influence between activity and financial distress. The results of this research support research conducted by Jiming and Weiwei (2011) in China, which stated that activities can influence financial distress, where the higher the activity measured by total assets turnover, the lower the possibility of financial distress. The greater the activity, the more efficient the use of overall assets in generating sales. On the other hand, the lower the activity, the more it shows that the company has not been able to maximize its assets. Companies with high activity values have good capabilities in processing their assets for company operational needs. Fulfilling the company's operational needs will cause the company to increase sales. An increase in sales will increase the company's assets, which can be used to fulfil the company's obligations. Fulfilling company obligations will reduce the risk of financial distress. This happens because high activity can minimize losses, so the company experiences fewer failures. If the process of selling goods takes longer, it will increase the company's burden and the risk of failure.

CONCLUSION

Based on the analysis results, it can be concluded that profitability significantly negatively influences the company's financial distress. This means that increases or decreases in profitability can influence fluctuations in financial distress conditions. Companies that can generate high profits have sufficient resources to run their business, increase principal trust, and reduce the potential for financial distress. However, liquidity has not been proven to influence financial distress significantly. Even though high liquidity allows a company to pay its short-term obligations, this does not guarantee avoiding the risk of financial distress because it must also fulfil its long-term obligations. Therefore, liquidity alone is insufficient to reduce the risk of financial distress.

Apart from that, leverage has a significant positive relationship with financial distress. Using high debt will increase the risk of default because the company lacks resources from profits to pay its debt. This indicates poor financial performance and increases the likelihood of financial distress. Finally, company activities also have a significant influence on financial distress. The higher the activity, the more efficient the use of assets in generating sales, reducing the risk of financial distress. Companies with high activity can maximize their assets for company operations, increase sales, and reduce the risk of failure.

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