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## **Post-Pandemic Textile and Garment Company Resilience in Indonesia**

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Asep Jamaludin <sup>1</sup>, Citra Savitri <sup>2</sup>, Rengga Madya Pranata <sup>3</sup>,  
Nandang <sup>4</sup>, Aji Tuhagana <sup>5</sup>

***Abstract:***

*We test the relationship between firm size, liquidity, leverage, and GDP with financial distress for a sample of companies from IDX Indonesia from 2020 to 2021, using 18 observations of textile and garment companies. In our test, we used panel data regression to test the hypothesis and MRA to measure the moderating variable. We found that almost all textile and garment companies experienced financial difficulties after the pandemic. Firm size and liquidity are factors that affect financial distress in textile and garment companies. Firm size has a positive influence on financial distress. GDP has a positive moderating effect on the relationship between liquidity and financial distress.*

**Keywords:** *Financial Distress, Firm Size, Liquidity, Leverage, GDP*

### **1. Introduction**

Following Covid 19, Indonesia has recently seen an upswing in economic growth. Increased export and import activity has just given multinational corporations a breath of fresh air, but this might only last a short while. According to the IMF, there will be a global economic recession in 2023, which would have an adverse effect on the performance of international trade, particularly in the trade of commodities (idxchannel, 2022). Under these circumstances, multinational corporations will see loans become more expensive, leading to lower inventories, as well as a decrease in the amount of external capital available to businesses with international operations (özyeşil, 2022). According to Pindado and Rodrigues (2005), MNCs have learned the hard way what happens when financial difficulty is ignored and what effect it has on the stability and expansion of their businesses. It may take a business up to three years to declare bankruptcy (Tinoco & Wilson 2013). A reduction in a firm's stock return can indicate the company is vulnerable to potential bankruptcy, which is a symptom of financial trouble (Beaver, 1966).

According to Khaliq et al. (2014), a corporation is in financial distress when it is unable to or is having trouble meeting its obligations to creditors. This circumstance

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<sup>1</sup>Universitas Buana Perjuangan Karawang, Indonesia.

<sup>2</sup>Universitas Buana Perjuangan Karawang, Indonesia.

<sup>3</sup>Universitas Buana Perjuangan Karawang, Indonesia.

<sup>4</sup>Universitas Buana Perjuangan Karawang, Indonesia. [nandang@ubpkarawang.ac.id](mailto:nandang@ubpkarawang.ac.id)

<sup>5</sup>Universitas Buana Perjuangan Karawang, Indonesia.

can arise when a corporation has large fixed costs, few liquid assets, or revenue that is very susceptible to economic downturns (Baimwera et al., 2014). Financial difficulty can also arise if a company lacks working capital and is unable to pay its debts off when they are due. High costs can be incurred by the company as a result of financial difficulties, thus management may be required to borrow money from other people to pay these commitments.

Companies in financial crisis should take into account early warning indicators of dividend announcement failures. The findings also imply that the model has to be refined by identifying factors that will have a greater influence on the financial distress of businesses operating in developed and emerging markets (Ashraf et al., 2019). The commencement of official bankruptcy filings may be postponed much beyond the threshold for smaller enterprises due to larger firm size characteristics, as evidenced by their better credibility in financial markets and long-term contracts (Moulton & Thomas, 1993). In comparison to small businesses, larger ones are less likely to experience financial troubles (Waqas & Md-Rus 2018). The likelihood of corporate financial troubles is negatively correlated with the size of the company (Dong et al., 2014; Chakraborty et al., 2018; Chung et al., 2010; Shahwan & Habib, 2020).

They emphasize the necessity of liquidity buffers for a firm's survival and contend that weaker demand brought on by a recession reduces internal cash flows while the potential for a credit crunch makes it difficult for credit-constrained firms to access external cash flows, raising the risk of financial distress (Richardson et al., 1998). The country's current restrictions can prevent a high degree of financial liquidity, which can lead to businesses going under. 2019 (Scalzer et al.). greater financial distress results from having greater liquidity than total deposits because banks are unable to generate income from idle surplus cash just to meet their financial obligations to depositors (Meher & Getaneh, 2019). Lower financial risk is associated with higher levels of liquidity indicators (Zelie & Wassie, 2019). However, liquidity exhibits a negative coefficient and does not significantly contribute to the prediction of financial hardship (Thai et al., 2014; Jaafar et al., 2018).

Most manufacturing companies need bank loans to finance their operations, which results in high leverage; however, an excessive reliance on debt financing exposes the company to financial troubles. High leverage can cause a company to encounter financial issues. In 2019, Lucky & Michael. Financial leverage increases the risk of financial trouble and decreases profitability because of implicit interest charges. Younas et al. (2011) noted that financial distress frequently involves significant levels of financial debt. According to Ohman and Yazdanfar (2018), laws that force banks to boost their capital buffers by raising financial leverage have improved their financial stability. Firms who had little financial leverage the year prior are more likely to have financial troubles this year during the financial crisis (Yazdanfar and Hman, 2020). Theoretically, M&M contends that companies can increase their worth by using more debt due to the advantages of the tax benefits associated with debt use. Leverage increases are advantageous for businesses. Given that interest payments are tax deductible at the corporate level, M&M contends that greater leverage affects both company value and performance (Modigliani & Miller, 1963).

You can learn more about how macroeconomic conditions influence the relationships between the elements that contribute to financial distress by using GDP as a moderator in your research. Using GDP as a moderator, you may observe how variations in GDP alter the correlation between the variables that cause financial distress. According to Tirapat and Nittayagasetwat (1999), this can help shed more light on how macroeconomic factors influence the likelihood of business financial hardship and can be helpful information for financial professionals and policymakers managing corporate financial risk. According to capital market theory, there is no systematic relationship between these variables and financial distress (Celli, M. 2015).

The purpose of this study is to analyze the factors that influence corporate financial distress, with a focus on multinational corporations (MNCs), and how macroeconomic conditions, such as economic growth and recession, can moderate the relationship between these factors and financial distress.

## **2. Methodology**

In order to describe the link between the research variables, a quantitative descriptive method with an explanatory research design is applied. Time series data from the company's annual report, which is accessible at [idx.co.id](http://idx.co.id), was used as secondary data in the data collection for this study. In addition, statistics from books and scholarly journals about financial distress, liquidity, company size, leverage, and GDP are also used as secondary data. Only 18 of the 22 manufacturing enterprises in the Textile and Garment Manufacturing sector, who make up the study's population, have financial statement data for the years 2021 to 2022.

The relationship between the independent variables (Size, Liquidity, Leverage, and GDP) and the dependent variable (Financial Distress) is examined using panel data regression analysis, which uses data that describes observations related to time and individuals or organizations. The level of the model's capacity to account for variations in the dependent variable is assessed in this analysis using the coefficient of determination ( $R^2$ ), which is calculated using the general equation as follows:

$$1. Y = \alpha - b_1X_1 + b_2X_2 + b_3X_3 + b_4X_4.$$

$$2. Y = \alpha - b_1X_1 + b_2X_2 + b_3X_3 + b_4X_1 \times X_4 + b_5X_2 \times X_4 + b_6X_3 \times X_4$$

The t test is used in the hypothesis testing method to illustrate how an independent variable affects the dependent variable only, and the F test to show how the independent variable affects both the dependent and independent variables concurrently

## **3. Empirical Findings/Result**

The findings of this research are displayed in Tables 1 and 2, outlining the computation of financial distress within companies and the outcomes of regression analyses. To offer a clearer perspective, let's delve into the subsequent explanation.

Based on the conveyed data, it is evident that a significant portion of textile and garment enterprises in Indonesia encountered financial challenges in the year 2021, with Altman Z-scores falling below the threshold of 2.6.

The Altman Z-score serves as a crucial gauge for assessing a company's susceptibility to bankruptcy. This score is computed by considering financial ratios such as the debt-to-equity ratio, profit-to-sales ratio, and liquidity ratio. A higher Altman Z-score reflects a diminished risk of bankruptcy, whereas a lower score signifies an elevated risk of insolvency. In preparation for economic downturns, textile and garment companies grappling with financial predicaments should adopt strategic measures to effectively manage financial risks and uphold the continuity of their operations. Failure to prudently manage finances could potentially lead a company to face the possibility of bankruptcy within a span of up to three years. As a result, Indonesian textile and garment companies facing financial hardships should take proactive steps without delay to avert the prospects of bankruptcy (Tinoco and Wilson, 2013).

**Table 1. Financial Distress Textile & Garment Company**

Company Code	Year	
	2020	2021
ARGO	-8.567	-8.736
BELL	1.597	1.812
ERTX	1.184	1.252
ESTI	-8.053	-8.116
HDTX	-33.701	-38.257
INDR	2.064	<b>2.982</b>
MYTX	-2.681	-2.769
PBRX	1.829	1.823
POLY	-32.629	-30.951
RICY	0.390	0.322
SBAT	0.413	0.303
SRIL	2.091	-7.647
SSTM	-0.688	0.110
STAR	<b>302.875</b>	<b>257.117</b>
TFCO	<b>10.776</b>	<b>10.594</b>
TRIS	1.136	1.233
UCID	3.286	3.744
ZONE	0.890	2.454

**Table 2. Variable Descriptive Statistics**

Variable	Mean	SD	Minimum	Maximum
FD	11.929	67.186	-38.256	302.275
Size	10.669	4.134	3.935	15.868
Liquidity	18.488	71.241	0.058	312.787
Leverage	3.003	20.144	-30.153	114.289
GDP	2.860	0.801	2.070	3.650
Size x GDP	30.517	14.956	8.147	57.850
Liquidity x GDP	52.667	210.159	0.121	1106.978
Leverage x GDP	12.537	70.934	-62.417	417.157

Variable	Size	Liquidity	Leverage	GDP
Size	1.00			
Liquidity	0.143	1.00		
Leverage	0.122	-0.037	1.00	
GDP	0.001	-0.003	0.251	1.00

**Table 3. Regression results**

Varibel	Financial Distress	
	Model 1	Model 2
Size	35.361***	10.205***
Likuiditas	-4.478***	0.888*
Leverage	-0.008*	0.435**
GDP	0.320*	
Size x GDP		0.015*
Likuiditas x GDP		0.11***
Leverage x GDP		-0.132**
Constant	-283.453	-118.644
Adjust R2	0.99	0.99
F - Statistic	918.582	6890.893

Model 1 is a model without moderator variables involved, for Model 2 moderator variables are involved in the dependent variable.

\* Significance at the 10% level.

\*\* Significance at the 5% level.

\*\*\* Significance at the 1% level

The fixed-effect model was utilized for the panel data regression in Model 1. Results from Model 1 indicate significant influences of firm size and liquidity on financial distress, both with probabilities below 0.05. Conversely, leverage and GDP exhibit probabilities above 0.05. The adjusted R-squared value, standing at 0.99, signifies a robust correlation between the independent variables and financial distress. This statistical importance is further underscored by the high F-statistic of 918.582. Transitioning to Model 2, employing the same fixed-effect model, findings suggest

that GDP solely moderates liquidity, displaying a positive moderation effect with a probability below 0.05. Model 2's adjusted R-squared value of 0.09 indicates a substantial correlation, and the F-statistic of 6890.893 reaffirms the model's suitability for application.

#### **4. Discussions**

Company size can indeed influence the likelihood of encountering financial difficulties. Larger corporations, renowned for enhanced financial market credibility and long-term contracts, generally face reduced risks of financial turmoil compared to their smaller counterparts (Moulton & Thomas, 1993; Waqas & Md-Rus, 2018). Nevertheless, even these larger entities might grapple with financial challenges if they mishandle debt and financial affairs. While past studies have indicated a negative relationship between company size and the risk of financial distress (Dong et al., 2014; Chakraborty et al., 2018; Chung et al., 2010; Shahwan & Habib, 2020), the current study's findings suggest a positive correlation. As company size increases, the likelihood of financial difficulties appears to decrease.

When an organization has limited liquidity, it might face difficulties in fulfilling its payments and debts on time, potentially leading to financial challenges. This situation becomes especially critical during periods of uncertainty or economic crises, when obtaining funding becomes more constrained, and the organization could experience heightened financial pressures. The importance of liquidity for a company's survival is emphasized, highlighting that reduced demand during a recession could decrease internal cash flows, while the potential for a credit crisis could impede the organization's access to external cash flows, thereby elevating the risk of financial hardship (Richardson et al., 1998). Regulations within a country could impose restrictions on maintaining high levels of financial liquidity, which could in turn contribute to corporate insolvency (Scalzer et al., 2019). Nevertheless, having excessive liquidity in relation to total deposits might introduce additional financial difficulties, as banks might be unable to generate earnings from idle surplus cash solely to meet their financial commitments to depositors (Meher & Getaneh, 2019). Elevated levels of liquidity indicators are associated with lower financial risks (Zelie & Wassie, 2019). However, it's worth noting that liquidity exhibits a negative coefficient and does not emerge as a significant predictor of financial distress in some studies (Thai et al., 2014; Jaafar et al., 2018).

#### **5. Conclusions**

The anticipation of a recession in 2023 raises apprehensions within Indonesia's textile and garment companies. Having navigated the COVID pandemic's turmoil, these firms are currently in a growth phase. Yet, a forthcoming recession could hinder their growth prospects. Companies with substantial assets are better poised to weather financial challenges, as these assets can provide a cushion during tough times. Liquidity also factors into the equation, influencing financial difficulties. The

moderating impact of GDP suggests that a company's liquidity would improve if a country's GDP sees an upswing. However, the prevailing outlook for 2023 suggests that in the event of a recession, GDP might struggle to make gains. Thus, companies must be proactive in preparing to tackle the projected recession in 2023.

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