


Earnings manipulation strategies during corporate financial failures: Evidence from Jordan



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ABSTRACT

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The purpose of this study is to examine the impact of pressure behaviors, specifically financial distress, on real earnings management activities. This study applies a data panel regression model. The hypothesis was examined by employing multiple linear regression and conducting robust regression on financial data from 48 industrial companies listed on the Amman Stock Exchange during the period of 2019 – 2023. The study employs a cross-sectional Roychowdhury model to assess real earnings management. The Z-Score model developed by Altman in 1968 is utilized to detect instances of corporate failure. The results indicate that financial distress leads to a marked rise in the practice of manipulating real earnings. This implies that as a company becomes less financially stable, the extent of manipulating real earnings through the management of production costs and discretionary expenses increases. However, the cash flow from operations indicates that financial distress has no significant effect. The study's conclusions have major implications for lenders, investors, and management, as financially unstable firms may manipulate earnings to obscure their true financial position. This analysis offers a more comprehensive understanding of the dependability of accounting data when evaluating the financial stability of a company.

Contribution/ Originality: This study provides new evidence from an emerging market setting by uniquely combining financial distress with real earnings management analysis in Jordanian industrial companies, using both the Altman Z-score and Roychowdhury models.

1. INTRODUCTION

Earnings management is a significant topic that has garnered attention in the field of business administration research. The activities of this concern have gained significant prominence in both international and domestic businesses across diverse industries such as manufacturing, services, and finance. Avoiding the practice of earnings management is inherently difficult during the financial reporting process. Earnings management involves the deliberate manipulation of accounting practices in order to portray a more favorable organizational performance. Earnings management transpires when managers exercise discretion in financial reporting and transaction structuring to manipulate financial statements, thereby misleading specific stakeholders regarding the company's true economic performance or affecting contractual outcomes reliant on reported accounting figures (Healy & Wahlen, 1999). Accrual earnings management refers to the manipulation of accounting methods or estimates within the accepted standards in order to hide the actual economic activity, while real earnings manipulation involves the alteration of actual business transactions.

Earnings management frequently emerges as a result of financial challenges that can affect the financial statements. Financial distress is the deterioration of financial circumstances that occurs prior to bankruptcy or liquidation, as highlighted by [Masdupi, Tasman, and Davista \(2018\)](#). Bankruptcy prediction models are often linked to financial distress. A firm's financial difficulties have a significant impact on stakeholders, including investors and creditors. The management of the company may face severe consequences, as highlighted by [Agrawal and Chatterjee \(2015\)](#). Companies may engage in earnings manipulation to strengthen their negotiating position in contractual arrangements to conceal their financial difficulties; insufficiency of resources can lead to financial difficulties for a company, as evidenced by studies conducted by [Harb, Shaqqour, Qushtom, and Ballout \(2025\)](#) and [Wiśniewska, Czapiewski, and Lizińska \(2024\)](#). To mitigate financial difficulties, companies employ earnings management as a performance measure; managers engage in the manipulation of specific accounts to present favorable reports and information to the capital market.

This research endeavor seeks to elucidate the particular determinants that contribute to earnings manipulation, with a concentrated focus on the influence of financial distress within the context of Jordanian **companies**. The study aims to systematically examine the correlation between financial distress and the magnitude of earnings management practices employed by firms. This investigation places a pronounced emphasis on the relatively underexplored domain of real earnings management.

2. LITERATURE REVIEW: EARNINGS MANAGEMENT AND FINANCIAL DISTRESS

The issue of financial distress in firms has been a longstanding concern for the investing public and governments. A substantial and continuous deterioration in a company's financial performance can ultimately lead to insolvency, causing investors and creditors to experience significant financial losses. Prior studies have noted that companies facing stressful circumstances tend to engage in income-increasing practices through earnings management to avoid bankruptcy, ensure compliance with debt agreements, or enhance managerial compensation, as emphasized by [Chhillar and Lellapalli \(2022\)](#). This phenomenon arises when managers deliberately alter the information disclosed in financial statements in order to deceive stakeholders regarding the organization's performance. [Dzung, Ngoc, Linh, and Van Cuong \(2024\)](#) have determined that there is a positive correlation between the degree of financial distress and the probability of companies engaging in earnings management practices.

The accounting research literature reveals that companies utilize diverse strategies to avoid unexpected negative profits and tend to boost their earnings to mitigate the risk of bankruptcy ([Le & Nguyen, 2024](#)). [Aljughaiman, Nguyen, Trinh, and Du \(2023\)](#) investigated the correlation between earnings management and financially distressed companies and suggested that companies experiencing moderate distress are more likely to employ upward earnings management, while companies facing severe distress are more inclined to utilize downward earnings management. [Zang \(2012\)](#) conducted a study that revealed a positive correlation between the financial health of publicly traded companies and their preference for real earnings management strategies over accrual earnings management approaches. This is because robust businesses have a greater ability to deviate from optimal business operations due to their competitive advantage. [Suhail and Gopaldaswamy \(2024\)](#) examine the influence of financial distress on the balance between real and accrual manipulation of earnings prior to declaring bankruptcy. According to their study, small and medium-sized private enterprises tend to heavily manipulate their real earnings and decrease their manipulation of earnings before going bankrupt. [Sumiyana, Na'im, Kurniawan, and Nugroho \(2023\)](#) explain the main factor behind the lack of earnings management in distressed firms, proposing that these firms may have already utilized all available methods to manipulate earnings before experiencing financial distress, or they may not see any advantages in engaging in such manipulation.

2.1. Hypotheses Development

Managers of financially distressed firms engage in earnings manipulation to mitigate the negative indicators associated with financial distress, thereby providing a positive signal to stakeholders. The presence of financial distress does not consistently incentivize a firm to engage in earnings management to enhance its reporting of profits. Disseminating biased information to stakeholders has a negative effect on decision-making processes and can disrupt the efficient operation of financial markets (Khresat & Abujassar, 2025; Rangapur, Wang, & Shu, 2023). Luu Thu (2023) states that financially troubled companies experience an increase in deflating discretionary accruals because it is the outcome of reversing the previously inflated cumulative accruals from prior years. Furthermore, this can be attributed to a shift from utilizing accrual-based methods of managing earnings to adopting real activity-based strategies that artificially inflate revenue. Investors, creditors, and managers are concerned about the potential occurrence of corporate financial distress. It describes a circumstance in which a company encounters financial difficulties, and if not promptly resolved, it may result in insolvency.

Financial distress occurs when a company is unable to fulfill its financial obligations to its creditors because it lacks sufficient funds to support its operations (Nagar & Sen, 2016). When companies face financial difficulties, managers are obligated to make difficult decisions to enhance the overall financial well-being of the company, which can impact the practice of managing earnings. Nagar and Sen (2016) found that firms experiencing early financial distress engage in real earnings management by decreasing expenses, such as selling and administrative expenses, to enhance profitability and liquidity. They used Altman's Z-Score as a measure of financial distress. During periods of worsening financial difficulties, these companies often turn to the practice of managing earnings to increase their income. According to Bansal (2024), struggling companies use strategies to manipulate their revenues in order to increase their income and found that financial distress has a notable and concurrent positive influence on the practice of manipulating earnings. This study suggests that companies facing financial difficulties are compelled to utilize aggressive methods of manipulating their earnings and making forecasts in order to minimize the potential adverse outcomes. When analyzing a particular situation involving loan covenant violations, the findings align with the observation that there is a higher reported income through the manipulation of wages in the year preceding the violation of the covenant (DeFond & Jiambalvo, 1994). They do this to avoid being delisted and to avoid being closely monitored by the government. Based on the lack of clear evidence regarding the link between company difficulties and tactics for managing earnings in Jordanian companies, the following null hypotheses were proposed:

Main Hypothesis (H₁): Financial distress is not associated with real earnings management practices.

H_{1a}: Financial distress is not associated with cash flow from operations as a proxy for real earnings management.

H_{1b}: Financial distress is not associated with production costs as a proxy for real earnings management.

H_{1c}: Financial distress is not associated with discretionary expenses as a proxy for real earnings management.

3. METHODOLOGY AND SAMPLE SELECTION

This research uses a quantitative methodology to examine data from firms listed on the Amman Stock Exchange. The observation period extends over five years, from 2019 to 2023, offering an extensive overview of the data across time. The sample comprises 240 firm-year observations. The year 2020, characterized by the COVID-19 pandemic, is utilized as a control variable to consider its possible effects on the industry. The research primarily examines the impact of financial distress on real earnings management while controlling for the pandemic's influence to achieve a precise understanding of the association between financial distress and earnings manipulation.

The study employs a static panel model, specifically utilizing multiple linear regression to evaluate the hypotheses. Multiple statistical methods, including Pearson's correlation, are utilized to ascertain probable correlations among the variables. Multiple linear regression is then performed to explore these associations in more depth, while regression diagnostics are conducted to address potential estimation difficulties such as heteroscedasticity and multicollinearity. The Hausman specification test, the Breusch-Pagan Lagrangian multiplier

test, and tests for heteroskedasticity validate that the results are reliable and consistent. This empirical approach facilitates a comprehensive examination of the determinants affecting real earnings management methods while carefully accounting for external issues such as financial crises and the repercussions of the COVID-19 pandemic.

3.1. Empirical Model

This study employs a comprehensive model that utilizes key proxies for real activities to assess the extent of real earnings management practices individually. The general purpose is to examine whether firms in the industrial sector of the Jordanian market have suffered from financial distress and, in response, have adopted REM strategies. To this end, the study includes several control variables in the analysis, such as financial leverage, free cash flow, profitability, and firm size. In addition, the study acknowledges the impact of the COVID-19 pandemic on financial markets and the global economy as a key factor that may affect the relationship between financial distress and REM practices.

To exclude the influence of the pandemic, the year 2020 was considered a control variable to ensure that the effects of COVID-19 do not distort the analysis of the relationship between the dependent and independent variables. Numerous studies and reports have delved into the challenges that banks encountered during this period, including risk management, changes in lending policies, and regulatory interventions. Magwedere and Marozva (2022) investigated the relationship between the credit risk of banks and liquidity in the context of the pandemic. To test the hypotheses, the following regression equation was estimated. The panel regression models were estimated using the methodology outlined below:

$$ABNEM_{i,t} = \alpha_0 + \beta_1(ZETA_{i,t}) + \beta_2(FLEV_{i,t}) + \beta_3(FCF_{i,t}) + \beta_4(PROF_{i,t}) + \beta_5(FSIZE_{i,t}) + \beta_6(COVID19) + (YEAR\ DUMMY) + \varepsilon_{i,t} \quad (1)$$

ABNEM is represented by abnormal real earnings management. ZETA indicates financial distress. FLEV is the financial leverage ratio, measured as a debt-to-asset ratio. FCF refers to free cash flow, calculated as FCF/total assets. PROF represents profitability, measured as net income to total assets. FSIZE denotes firm size, where total assets are measured as the natural logarithm. COVID-19 is a dummy variable set at 1 if the financial statement was prepared after the World Health Organization classified COVID-19 as a global pandemic and 0 otherwise. The year variable, denoted by YEAR, is an indicator variable that takes the value of 1 if firm i is present in year t and 0 if it is not. ε is the error term.

3.2. Variable Measurement

The choice of variables in this study is determined by their significance in analyzing the correlation between financial distress and real earnings management. The selected independent variables represent critical financial and organizational aspects that may affect a firm's decision to get involved in earnings manipulation. These factors encompass indicators of financial distress, leverage, free cash flow, profitability, company size, and external shocks, such as the COVID-19 pandemic. The study seeks to encompass these elements to obtain a thorough perspective on the factors influencing real profits management, facilitating a detailed comprehension of the circumstances under which companies may alter their financial statements. The incorporation of control variables guarantees that the findings consider other aspects influencing earnings management, thereby augmenting the analysis's robustness.

Real earnings management proxies are obtained from the models developed by Dechow, Sloan, and Sweeney (1995) and further developed and used by Roychowdhury (2006) and other researchers. As suggested by Roychowdhury (2006), earnings management behavior implies a departure from normal operating procedures with the aim of attaining specific earnings targets. This framework recognizes three main proxies for real activities: abnormal cash flow from operations (CFO), abnormal production costs (PROD), and abnormal discretionary expenses (DISEXP) as used in studies by Roychowdhury (2006) and Zang (2012). Heteroscedasticity was addressed by

standardizing the measurements of these earnings management variables using lagged total assets, and abnormal levels were calculated as the deviation from normal levels.

Roychowdhury's (2006) model is useful for identifying manipulation of earnings through cash flow by comparing actual cash flows with industry norms calculated through regression analysis for different industries and years to see how well they match up. In this approach, the CFO's performance at the close of each year is portrayed as a relationship between present sales and sales variation. Producing goods or improving product quality beyond the level needed to reach certain goals is what we refer to as overproduction in business terms. The standard production costs are calculated by considering variations in inventory along with the cost of goods sold. Research and development, advertising and selling, and general and administrative expenses are computed as the sum of discretionary expenses; managers can enhance profitability by reducing these expenses.

According to Altman (2000), companies are classified into three groups based on their outcomes. Firms with a score below 1.80 are considered at risk of bankruptcy or experiencing financial distress, while those with a score above 3.0 are viewed as financially robust. Companies scoring between 1.81 and 3.0 are labeled as unpredictable, reflecting uncertainty in their financial condition. Furthermore, firms with a Z-Score above the median are identified as low distress, whereas those below the median are categorized as high distress. The study utilizes the Altman Z-Score model (Altman, 2000) to evaluate financial distress. The measurement process is as follows:

$$\text{Zscore} = 1.2 \frac{\text{WC}}{\text{TA}} + 1.4 \left(\frac{\text{RE}}{\text{TA}} \right) + 3.3 \left(\frac{\text{EBIT}}{\text{TA}} \right) + 0.6 \left(\frac{\text{MVE}}{\text{BVL}} \right) + 1.0 \left(\frac{\text{SALES}}{\text{TA}} \right) \quad (2)$$

The variables in this study are defined as follows: WC represents working capital, while TA denotes total assets. RE corresponds to retained earnings, and EBIT refers to earnings before interest and taxes. MVE signifies the market value of equity, whereas BVL represents the book value of liabilities.

4. RESULTS AND DISCUSSION

The following table displays the descriptive statistics for the regression variables employed in the study. In order to enhance the resilience of the data, a technique called robust scaling was employed to make the data less sensitive to extreme values and outliers. Table 1 presents the descriptive statistics, indicating that the mean values of the real earnings management variables are positive, suggesting that the Jordanian industrial sector is involved in income-increasing earnings management, with a very low standard deviation. Earnings management variables exhibit a narrow range of values across firms, as indicated by the minimum and maximum values. The mean Altman's Z-Score is 2.671, indicating that the sample is financially unpredictable, reflecting a state of uncertainty. There is variation among firms due to a standard deviation of 2.695. During the study period, the Altman Z-Score ranged from -1.112 to 9.424.

Table 1. Descriptive analysis.

Variables	Mean	Median	Min.	Max.	Standard deviation
CFO	0.048	0.040	0.001	0.134	0.037
PROD	0.052	0.032	0.000	0.197	0.054
DISEXP	0.042	0.024	0.001	0.152	0.044
ZETA	2.671	1.684	-1.112	9.424	2.695
FLEV	0.368	0.351	0.040	0.759	0.201
FCF	-0.000	0.014	-0.258	0.107	0.074
PROF	0.004	0.011	-0.242	0.131	0.082
FSIZE	17.191	17.071	15.188	19.878	1.139

Source: Based on authors' analysis of research data.

Table 2 displays the correlation analysis of the research variables, revealing the strength and direction of their relationship. The correlation matrix indicates that all correlation coefficients between the variables are below 0.8. The correlation between earnings management variables is not highly significant; it is evident that the three

composite measures of earnings management capture distinct facets of the earnings management concept. All independent variables were included in a single regression model due to the absence of multicollinearity issues. A variance inflation factor test was performed to detect any multicollinearity problems among the independent variables. The values obtained, approximately 3, are lower than the critical value suggested by Myers (1990). Therefore, there is no indication of multicollinearity in the model.

Table 2. Correlation matrix.

Variables	CFO	PROD	DISEXP	ZETA	FLEV	FCF	PROF	FSIZE
CFO	1.000							
PROD	0.159 (0.013)	1.000						
DISEXP	-0.058 (0.363)	0.300 (0.000)	1.000					
ZETA	0.106 (0.097)	0.211 (0.001)	0.036 (0.577)	1.000				
FLEV	0.091 (0.156)	0.021 (0.748)	0.060 (0.352)	-0.622 (0.000)	1.000			
FCF	-0.022 (0.734)	0.230 (0.000)	0.048 (0.449)	0.499 (0.000)	-0.562 (0.000)	1.000		
PROF	0.071 (0.264)	0.294 (0.000)	0.065 (0.310)	0.692 (0.000)	-0.496 (0.000)	0.808 (0.000)	1.000	
FSIZE	0.241 (0.000)	0.032 (0.612)	-0.177 (0.005)	0.210 (0.001)	0.117 (0.068)	0.038 (0.550)	0.149 (0.019)	1.000

Source: Based on authors' analysis of research data.

Table 3 shows the Breusch-Pagan/Cook-Weisberg test result to search for heteroskedasticity in the dataset. Based on the null hypothesis—which holds that the variance of the errors remains constant regardless of the values of the independent variables—the test is stated differently; it assumes that the error terms are not dependent on the predictor values. However, the findings from this test indicated the presence of heteroskedasticity. Specifically, the p-values reported (Prob > Chi2 = 0.0000) were all significantly less than the 5% significance level for every model tested. This suggests that the test rejects the null hypothesis of constant variance, thereby confirming the presence of heteroskedasticity in the data. Robust standard errors were used to address this issue and improve the reliability and accuracy of the results, as stated in Polselli (2023). By compensating for the variability in the data that heteroskedasticity introduces, these robust standard errors are intended to provide more consistent estimates.

Table 3. Hausman-test for heteroskedasticity.

Breusch-Pagan / Cook-Weisberg test	Model 1	Model 2	Model 3
Chow-test chi2(1)	13.21	113.39	22.79
Hausman-test (Prob > chi2)	0.000	0.000	0.000

Source: Based on authors' analysis of research data.

Table 4 presents the Breusch and Pagan Lagrangian Multiplier test for random effects, showing that the model should incorporate random effects. The fact that all three proxies produce a p-value of 0.000 clearly indicates that random effects are important and necessary for the model, thereby highlighting the need to account for these data variances (Breusch & Pagan, 1980).

Table 4. Breusch and Pagan Lagrangian multiplier test.

	chibar2(01)	Prob > chibar2
CFO	0.00	0.000
PROD	81.34	0.000
DISEXP	376.89	0.000

Source: Based on authors' analysis of research data.

The findings from the Hausman test, as established by Hausman (1978), provide empirical support for the application of the random effects model across all examined models. Table 5 explains the test results, which reveal that the chi-square statistic associated with cross-sectional random effects is substantially high, and the corresponding p-value exceeds the threshold of 0.05. This indicates that there is no significant statistical evidence to reject the null hypothesis, thereby reinforcing the appropriateness of the random effects model for the given data.

Table 5. Hausman specification test.

	Coef. CFO	Coef. PROD	Coef. DISEXP
Chi-square test value	8.535	5.222	4.704
P-value	0.129	0.389	0.453

Source: Based on authors' analysis of research data.

5. EMPIRICAL RESULT AND DISCUSSION

The regression analysis, conducted with the STATA program, demonstrated that the random effects model was appropriate for this research regression. This study investigates how financial distress, as measured by Altman's Z-Score, influences real earnings management practices among publicly listed companies in Jordan. The outcomes highlight that the companies that are more financially distressed are specifically more likely to be involved in real earnings management practices. Among these behaviors are overproduction by manufacturing more items than required, managing sales figures to show a more positive financial situation, and changing discretionary spending to control earnings results. This implies that businesses may use aggressive earnings management strategies to satisfy performance criteria and enhance their financial position driven by financial challenges. All the variables used in the model simultaneously affect real earnings management positively, as stated in Zang (2012), who conducted a study investigating how distress levels affect earnings management practices. Muhammed Suhail and Gopalaswamy (2023) indicate that higher levels of distress in a company are associated with real earnings management. This is done to influence stakeholders and give the impression that the company is financially stable to prevent further concern.

Table 6 presents the findings from Model 1, which was designed to test Hypothesis 1. In this analysis, the Z-Score variable displayed a positive impact on the manipulation of cash flow from operations, but this effect was not statistically significant. Specifically, the coefficient for the Z-Score variable was 0.003, with a probability value of 0.256. This probability value is above the conventional significance threshold. Moreover, the outcomes suggest that when a company is facing financial difficulties, different plans might be employed to manipulate earnings. Overall, the result supports Hypothesis 1 by suggesting that the probability of earnings manipulation is influenced by the company's financial state, with managers possibly adopting different tactics depending on whether the company is experiencing financial distress. This aligns with the research findings conducted by Sumiyana et al. (2023).

Table 7 summarizes the results of Model 2, intended to test Hypothesis 2. The p-value of the analysis is 0.001, which is significant. This significant p-value shows a strong statistical link between the application of industrial cost control strategies and the financial crisis. The positive coefficient value of 0.009 further emphasizes this association, indicating that the likelihood of managers manipulating production costs increases in line with the rising financial crisis. This result suggests that businesses facing financial problems are more likely to implement plans that include changing production costs to control their financial reporting results. Generally, the findings highlight managers' inclination to resort to production cost control in response to the financial crisis. This result is consistent with Suhail and Gopalaswamy (2024), who noted that businesses under greater stress usually turn to overproduction methods. This approach seeks to give the impression of financial stability and attract investors, thereby guiding away further problems.

Table 8 shows the Model 3 results, developed to evaluate Hypothesis 3. The study finds a p-value of 0.076, suggesting a significant link between financial difficulty and manipulation of discretionary expenditure. The favorable coefficient value of 0.013 indicates that companies under financial difficulty have a tendency to participate more often

in real earnings management through discretionary expenditure manipulation. This observation suggests that businesses facing financial difficulty are more inclined to implement plans that include the modification of discretionary expenses to impact their financial statements. This result significantly contributes to the literature by building upon the contributions of Gandhi (2024) and others who have examined earnings management in the context of financial distress. This study highlights the significance of discretionary expenses in real earnings management strategies, an area that has received limited attention regarding emerging market companies (Chhillar & Lellapalli, 2022).

Table 6. Cash flow from operations regression results.

CFO	Coef.	Std.err.	t-value	p-value	[95% conf	Interval]
Zeta	0.003	0.002	1.14	0.256	-0.002	0.007
FLEV	0.066	0.028	2.40	0.017	0.012	0.12
FCF	-0.065	0.097	-0.67	0.506	-0.255	0.126
PROF	0.108	0.102	1.06	0.291	-0.092	0.307
FSIZE	0.007	0.003	2.12	0.034	0.001	0.014
COVID	-8.500	4.200	-2.02	0.045	-16.700	-0.300
Constant	-0.103	0.057	-1.82	0.068	-0.214	0.008
Mean dependent var		0.056	SD dependent var		0.065	
Overall r-squared		0.084	Number of obs.		240	
Chi-square		21.860	Prob > chi2		0.001	
R-squared within		0.001	R-squared between		0.418	

Table 7. Production costs regression results.

PROD	Coef.	Std. err.	t-value	p-value	[95% conf	Interval]
Zeta	0.009	0.003	3.45	0.001	0.004	0.014
FLEV	0.143	0.036	4.01	0	0.073	0.212
FCF	0.164	0.098	1.67	0.095	-0.028	0.356
PROF	0.027	0.107	0.25	0.8	-0.182	0.236
FSIZE	-0.004	0.006	-0.73	0.465	-0.016	0.007
COVID	-12.500	2.500	-5.00	0.000	-17.400	-7.600
Constant	0.052	0.097	0.53	0.595	-0.139	0.242
Mean dependent var		0.057	SD dependent var		0.069	
Overall r-squared		0.140	Number of obs.		240	
Chi-square		29.793	Prob > chi2		0.000	
R-squared within		0.097	R-squared between		0.182	

Table 8. Discretionary expenses regression results.

DISEXP	Coef.	Std.err.	t-value	p-value	[95% conf	Interval]
Zeta	0.013	0.007	1.77	0.076	-0.001	0.027
FLEV	0.188	0.103	1.83	0.067	-0.013	0.389
FCF	0.347	0.283	1.22	0.221	-0.209	0.902
PROF	-0.185	0.308	-0.60	0.548	-0.787	0.418
FSIZE	-0.017	0.017	-1.05	0.295	-0.05	0.015
COVID	-15.200	3.000	-5.07	0.000	-21.100	-9.300
Constant	0.272	0.281	0.97	0.333	-0.279	0.823
Mean dependent var		0.074	SD dependent var		0.186	
Overall r-squared		0.048	Number of obs.		240	
Chi-square		5.436	Prob > chi2		0.365	
R-squared within		0.012	R-squared between		0.086	

6. CONCLUSION

This article offers a thorough analysis of the industrial sector of the Amman Stock Exchange's real earnings management practices' correlation with the financial crisis. Panel regression research and robust statistical approaches show that financial difficulty significantly increases the likelihood of earnings manipulation through changes in production costs and management of discretionary spending. Cash flow from operations, however, does not show a clear correlation with the financial crisis, implying that not all real earnings management strategies are

equally influenced by financial constraints. For lenders, investors, and firm executives, these results have important consequences. When reviewing financial statements, stakeholders must exercise due diligence since financially troubled corporations may falsify earnings to hide their true financial situation. This emphasizes how crucial it is for regulatory authorities to strengthen financial reporting transparency and enhance monitoring systems to identify and mitigate methods of earnings management. Transparency demands, stricter auditing rules, and early-warning systems for financially unstable businesses help to reduce opportunistic earnings management.

Particularly for companies going through a financial crisis, regulatory agencies should consider changing financial disclosure requirements to improve accountability. Stressing stricter monitoring policies for high-risk businesses and strengthening investor protection policies could help to boost trust and market equilibrium. Future studies could examine sector-specific regulatory reactions, additional moderating factors, or the impact of corporate governance in reducing profit management techniques.

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Data Availability Statement: Upon a reasonable request, the supporting data of this study can be provided by Monira Abujassar.

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