

Exploring Relationship Between Earnings Management, Financial Distress, Leverage and Profitability

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ABSTRACT

This study will examine the correlation of earnings management, financial distress, leverage, and free cash flows within the framework of leading Jordanian enterprises. Managers are more inclined to exaggerate their stated profitability to leverage the company's already substantial profits. Because free cash flow and earnings management are inversely related, managers will use earnings management to make sure that operations stay open and running when cash flow is low. Researchers also discovered that strict external oversight decreases the probability of managers engaging in earnings management. The negative relationship between having money problems and managing earnings suggests that managers may change how things are done when things are going well and when things are going badly.

Keywords: Earnings management, Financial Distress, leverage, Z-Score, Free Cash Flows, Profitability

1. Introduction

The main aim of financial statement reporting is to provide accurate and timely annual financial information to all stakeholders, whether they are internal or external. The report includes a crucial element of accounting profits that assists users in developing corporate policy. Decisions regarding debt covenants, capital acquisition, executive remuneration, and other critical factors are based on the insights provided in annual reports [1]. External investors can improve their investment decisions by leveraging the data derived from the reports. In an ideal scenario, a company's reported results would accurately reflect its operational economy and support effective resource allocation within the organisation. The responsibility for reporting and collecting firm-specific information predominantly lies with management, who, unlike external information users, have the ability to portray the company's profitability as they see fit. The topic known as earnings management (EM) is of considerable relevance to both researchers and professionals [2]. "Earnings management" refers to the practice in which managers utilise their discretion in financial reporting and transaction structuring to alter financial statements, thus potentially distorting the perception of the company's financial performance among specific stakeholders or influencing the outcomes of contracts

dependent on those figures [3]. Managers can leverage earnings data to deliver more relevant and precise insights into an organization's financial performance for shareholders and creditors. If this holds true, it suggests that earnings management might not have a negative impact on shareholders or the broader public. However, the financial crises of WorldCom and Enron prompted a shift towards a more opportunistic approach to earnings management. [4-7] collectively indicate that managers engage in profit manipulation primarily for personal gain, rather than prioritising shareholder interests.

Many studies regarding earnings management operate under the assumption that managers prioritise their own interests. [8] examine the ability to pursue goals that extend beyond individual interests. The existing literature on the subject appears to lack sufficient theoretical frameworks to explain individuals' involvement in pay management. Earnings management is possible, but more research needs to be done to find out how it works and what situations these processes negatively affect. [9] contends that business executives "meticulously protect" their strategies for managing earnings. This article analyses the literature on earnings management through the lens of a board of directors, focusing on the genuine responsibilities of boards and the legal frameworks that govern earnings management.

One the most cited reason for earnings management relates to tax evasion. While tax evasion or minimisation can benefit the corporation and its shareholders, they result in a loss of funds for the government, which could be more effectively directed towards social programs and infrastructure development. Studies on corporate tax avoidance show that tax authorities, firm managers and directors, shareholders, and the public are all worried about the possible conflict that arises when managers focus on making money for shareholders instead of paying state taxes [10]. Graham, Hanlon [11] investigated the implications of employing earnings management as a strategy to avoid tax liabilities. Kim, Li [12] investigated the relationship between corporate tax evasion and the probability of a stock market collapse. The study indicated that individuals who seek to avoid negative news tend to accumulate it, which could negatively impact a company's stock price when it is released to the market. There is considerable interest in understanding the reasons behind corporations' involvement in EM. Research findings suggest that corporations tend to underreport their profits as a strategy to avoid tax liabilities [13].

Norton, Wang [14] suggest that a majority of earlier research on accounting decision-making and profit management has used archival methods. A lot of research on earnings management is based on existing financial data, which makes it harder to figure out what management is really up to and changes how profits and earnings quality are judged [15]. Hayes, Lemmon [16] investigate accounting choice research, earnings management, and the behaviour of decision-makers through survey research. Furthermore, they highlight that most previous research has overlooked auditors and corporate directors, instead focusing predominantly on managers. The depiction of managers reflects a focus on self-serving interests, while auditors and directors act as guardians, limiting managers' capacity to influence earnings and accounting decisions. They acknowledge the ability of surveys and assessments to clarify the distinct roles undertaken by each party. These methodological approaches emphasise the concentrated cognitive attributes they enable [17].

A significant number of studies have focused on EM, with the literature examining a wide range of topics relevant to the field. Companies' fundamental strategies for managing profitability have been the subject of thorough examination. Studies show that organisations frequently use approaches like revenue maximisation, income smoothing, and big bath accounting to influence their profitability [18]. Corporations must pay taxes on a portion of their reported earnings, known as taxable income, in accordance with the tax regulations of each jurisdiction in which they conduct business. Corporate tax, which includes all taxes levied on an entity's taxable income, represents a considerable cost for corporations. Over the years, business leaders have employed various strategies to reduce or avoid corporation tax obligations, with the objective of increasing shareholder value while keeping costs low.

This study will look into the relationship between earnings management, financial distress, leverage, and free cash flows. The study's findings would help authorities understand regulatory enforcement and boost public confidence in the veracity of financial reporting. This research will help both present and potential investors, as well as regulatory agencies responsible for ensuring the accuracy of business financial reporting. The main focus of the study is the Kingdom of Jordan, and exhibited tremendous resilience in preserving stability and progress in the face of global and regional difficulties. Jordan's status as one of the most water-scarce countries makes it particularly sensitive to climate change. Jordan also hosts 1.3 million Syrian refugees, accounting for roughly 12% of the entire population. This advantage is available for everyone on Earth. Over the last decade, the nation has grown at an average pace of 2.5%. In 2021, Jordan's government launched a decade-long strategy to modernise the country's economy, public sector, and political structure. The revisions aim to democratize political life by empowering women and youth, doubling Jordan's growth rate, and creating one million new jobs. They will improve living conditions, encourage sustainability, and increase government performance and accountability. Jordanian diplomacy is anticipated to be more active and powerful on the world stage this year. Close engagement and help during these difficult economic times are likely to be critical for Jordan to achieve a just and equitable resolution to the Palestinian issue from the US, UK, and EU.

2. Literature Review

According to Kasznik and McNichols [19], insiders manipulate earnings by using tricks to change reported numbers or results to please outside stakeholders while still following GAAP rules. Firms only employ earnings management when they deem it essential [20]. The primary objective of earnings management is typically to regularise income. Organisations may employ diverse income management strategies to achieve this objective. On the one hand, there is a trend among corporate managers to minimise previously significant declared earnings. However, when the company's declared earnings decline, managers strive to increase them [21]. Furthermore, CEOs employ earnings management to maintain their competitive edge and achieve personal contractual objectives associated with reported accounting metrics [22]. Executives may exaggerate the company's reported income to demonstrate profitability and secure more compensation when the business does well in

the future. Profit management strategies can influence business performance positively or negatively, contingent upon their use by managers [3].

This conflict between management's duty as agents for the company and shareholders' position as owners of the enterprise emerges, as posited by agency theory [23]. Managers frequently prioritise their personal interests, even at the expense of shareholders. Earnings management, which affects the transparency of financial statements, stems from the conflict of interest between administrators and shareholders [24]. While managers are careful in the preparation of financial accounts, they exercise discretion in presenting outcomes to manipulate the company's performance and advance their personal interests. Fong and Tosi [25] assert that managers can affect a company's financial success via earnings management. Consequently, executives' implementation of earnings management tactics may enhance or detract from the company's financial performance. A multitude of studies have investigated the relationship between non-financial businesses' earnings management techniques and their efficacy. The literature regarding earnings management and corporate success, however, reveals contradictory results. Shi, Connelly [26] observe a negative correlation between earnings management approaches and return on assets as an indicator of firm value.

Durtschi and Easton [27] assert that the stock market performance of firms involved in earnings management is subpar. According to Barua, Lin [28], companies attempt to circumvent earnings management practices that diminish their long-term value. Numerous studies have demonstrated that organisations that are proficient in financial management perform more effectively. Lopez and Rees [29] analysed the correlation between earnings management and corporate performance using data from 67 non-financial firms. A distinct correlation exists between the volume of managed earnings and the company's growth and performance. The data indicates that high-performing organisations typically have superior profit margins [30]. They observe a negative link between reported earnings and anticipated growth. McAnally, Srivastava [31] explores the diverse functions of accounting in societal contexts. Practical accounting shows a notable distinction from the principles and research of theoretical accounting [32]. An improved comprehension of accounting is necessary across a broader range of contexts and formats.

Executives employ earnings management as a mechanism to obtain additional benefits [33]. Previous research indicates that managers frequently attempt to demonstrate a decrease in revenues in order to lower the firm's stock price. In the year preceding the buyout announcement, [34] presented evidence of earnings management through discretionary accrual methods. Before the management buyout, they discovered that discretionary accruals were negative. Carver, Hollingsworth [35] assert that managers employ earnings management techniques to secure substantial profit incentives. The relationship among earnings management, executive stock plans, and corporate performance requires further empirical examination. Executive stock options aim to motivate the implementation of strategies that enhance the company's worth and share price [19].

Certain studies indicate that CEO stock options may promote earnings management [36-39]. Understating stated earnings for the current period exemplifies earnings management that managers may employ to diminish the market price of the company's common stock. To acquire common stocks

at a reduced price, administrators manipulate the findings. According to O'Connor, Priem [40], executive stock options may have a lower exercise price if the stock price goes down because the company lost money during the reporting period. Cheng and Warfield [41] assert that managers receiving stock compensation are more inclined to employ earnings management strategies. The company's future success dictates managers' remuneration via stock-based compensation [33]. Recent empirical research has extensively examined the factors that motivate CEOs to achieve their profit objectives. CEOs manipulate their earnings to enhance their compensation, as stated by [42].

Incompetent management seeking to exploit a situation may fabricate financial records to create the illusion of a thriving company. This study examines the manager's opportunistic actions and their impact on the company's profitability and cash flow. Managers may manipulate profitability and create an agency problem by leveraging a substantial amount of free cash flow. Jerald E. Pinto, Thomas R. Robinson [43] defines free cash flow as the excess of cash flows available to finance projects with a positive net present value. A manager engages in an agency problem if he or she misuses or misappropriates free cash flow from the company in an attempt to increase shareholder wealth [44]. The manager is at liberty to invest in ventures with either high or low returns. If the manager opts to invest in an endeavour that will generate no results or yield minimal returns, the company may experience a low-growth scenario. Prior research indicates that managers may gain advantages from an abundance of free cash flow [45, 46]. Firms with surplus free cash flow frequently employ discretionary accruals (DAC) to distort their profitability. De Villiers, J.U. [47] discovered that managers are more inclined to convey signals of financial flexibility and income-enhancing management methods when they possess ample free cash flow. The agency problem frequently arises in firms with substantial free cash flows but limited expansion opportunities, leading managers to manipulate earnings growth to exaggerate profit assertions [48].

When a company's cash flow is in surplus, it is more inclined to issue debt to procure capital from external sources, as noted by [49]. The manager ought to allocate the surplus cash flow towards profit-generating activities instead of retaining it idle. If there aren't many growth opportunities and free cash flow, stakeholders like institutional shareholders, lenders, the audit committee, and the board of directors may set up ways to keep an eye on and control management, which would be good for the company's finances [50]. To enhance the offer price and investors' anticipations regarding the company's future prosperity, management frequently disclosed inflated reported earnings [51]. Moreover, stabilising earnings is essential for managers of firms experiencing declining profitability [52]. Additionally, managers would utilise the company's income and profitability to achieve stability, despite the inherent unpredictability of these variables [53]. According to Matsumoto [30], the three objectives of earnings management are to maximise managers' wealth and welfare, reduce political expenses, and decrease the company's financial costs. Consequently, the managers' strategy for earnings management should achieve one of these objectives.

Baker, Collins [54] assert that the primary objective of option compensation is to reconcile the interests of managers with those of external shareholders. The pay-performance sensitivity (delta) of option compensation motivates managers to exert effort, as their wealth is contingent upon stock

prices. Equity ownership can lead risk-averse managers who lack diversification to reject riskier, positive-NPV projects [55]. On the other hand, the convexity of stock option payout structures (vega) makes managers less afraid of taking risks [56]. Consequently, option compensation is a crucial instrument for enhancing shareholder value. Nonetheless, a considerable body of research has concentrated on a persistent inquiry regarding whether option compensation induces opportunistic management behaviours (as indicated in the introduction). Burgstahler and Eames [57] describe two scenarios in which option pay may augment opportunistic management strategies. The examination of present earnings is the initial phase for investors in formulating their projections for future earnings. Earnings management may influence stock prices in this instance. [58] states that investors use current earnings as an indicator of a company's value, reinforcing this notion.

The second criterion is that the management team can benefit from higher stock prices. Opportunities frequently manifest for managers in a particular manner. Libby and Kinney [59] assert that these decisions typically do not yield effectiveness for several years thereafter. Exercisable options are accessible annually because of the periodic nature of option granting and the partial vesting that occurs over a two- to four-year timeframe [58] assert that, with the market's naive focus on profits, managers might individually benefit from earnings management that enhances stock prices. Despite the market's scepticism, [51] contends that investors will consider earnings management when assessing a company's value based on its current results. Such exceedingly poor results may prompt risk-averse managers to reconsider taking opportunities. So, if greedy management actions raise risk and stock prices at the same time, delta's motivating effects will cancel it out [60]. Consequently, vega offers managers strong incentives to take risks, as their portfolio wealth rises in proportion to the risks their firms take, assuming all other factors remain unchanged. Ultimately, this intricate perspective complicates the determination of the extent to which option compensation influences managers' tendency to engage in opportunistic behaviour [41].

The conflicting results of previous studies also help to elucidate this ambiguous expectation. Several studies have identified a favourable correlation between discretionary accruals and equity incentives: Cheng and Warfield [41]. Nonetheless, there is dissent on the existence of accounting fraud and misstatements. According to [33], a CEO's option portfolio exhibits a positive correlation with the likelihood of misstatements, whereas [37] indicate a positive relationship between option remuneration and private securities litigation. Edmans, Fang [61] similarly discover a positive correlation between allegations of fraud and executive stock option incentives.

According to Erickson, Hanlon [62], there is no correlation between accounting fraud and executive equity incentives, whether vested or unvested, or misleading financial statements. Jayaraman and Milbourn [33] assert that substantial stock option grants may either mitigate or exacerbate the risk of fraudulent reporting, contingent upon several elements of corporate governance. Armstrong, Jagolinzer [63] identify a correlation between misreporting and CEO equity incentives when auditor expertise is deficient. While no correlation exists between manipulations and CFO equity incentives, Jensen [24] identified a significant link between large accounting manipulations and CEO equity incentives. Jochem, Ladika [64] found a negative link between accounting violations

and CEO equity incentives when they match CEOs based on the important parts of their contracting situations.

According to [39], companies with stock ownership plans requiring CEOs to increase their equity holdings are less likely to meet or surpass analysts' projections. Jiang, Petroni [17] discovered that organisations that reward analysts with options are more inclined to adhere to their recommendations and attain or exceed their objectives. Even so, they haven't been able to find a link between option-based pay and companies that use strange accruals to beat analyst predictions. Research by Yermack [36] indicates that option awards are associated with unmet earnings targets. Upon reviewing prior studies, one can discover numerous intriguing findings. Initially, there are divergent views regarding the correlation between opportunistic management strategies and executive equity incentives. Secondly, several endogeneity issues have afflicted the majority of prior studies due to the widespread use of regression designs. Armstrong and Vashishtha [65] suggest that the inconsistent outcomes of previous studies may stem from variations in research methodologies. Some studies show a link between equity incentives and false reporting; on the other hand, other studies using regression models show either no link or a negative correlation [63, 66].

Generally, when a corporation encounters difficulties, they signify an impending inability to fulfil its financial obligations. Subsequently, the corporation may either declare bankruptcy or undergo reorganisation [67]. Companies experiencing financial distress are those whose contracts or agreements with creditors are either ineffective or in a precarious condition, as stated by [68]. Habib [69] demonstrated that debt ratios above one (>1) or interest coverage ratios below one (<1) based on cash flow are symptomatic of distressed enterprises.

Recessions frequently occur following financial crises and have adversely affected most struggling enterprises [67]. Despite the economic downturn, numerous companies continue to experience financial difficulties. This encompasses modifications to accounting methodologies, also known as "creative accounting," as well as increased competition from abroad. According to McAnally, Srivastava [31], a corporation may experience financial difficulties for three potential reasons. They determined that inadequate industry performance and subpar firm-specific performance were the principal causes of financial hardship, whereas high debt was a significant contributing factor. [70] identified high-leverage transactions as a common source of financial difficulties. The company's substantial leverage is the primary reason for its cash shortfall, as it requires funds to cover its expenses. Furthermore, during an economic downturn, deeply indebted firms are more inclined to undertake hedging activities, as noted by [71], which is the primary cause of their financial difficulties. Depending on the severity of the financial circumstances, one may opt for discretionary accruals that either augment or diminish income [72]. The use of income-enhancing discretionary accruals is more prevalent when management perceives that financial difficulties will be transient and vice versa. Because these companies had a history of manipulating earnings to make them look better before the violations, their managers are more likely to use techniques that lower earnings to make them look better, similar to what businesses do when they file for bankruptcy [73]. Consequently, earnings management that diminishes revenue is their exclusive alternative.

2.1 Reserch Hypothesis

H1: A substantial correlation exists between opportunistic behaviours, shown by free cash flow and profitability, and earnings management.

H2: A substantial correlation exists between monitoring mechanisms (represented by leverage) and earnings management.

H3: A substantial correlation exists between financial strain and earnings management.

3. Research Design

The research used Kothari's model to examine earnings management [74]. Ayers, Jiang [34] and Jackson [75] have conducted research that supports the use of this statistic. Anomaly accrual, which is another name for discretionary accrual, has been used a lot in research by [75-77]. This is because it accurately and intuitively shows the quality of accounting information. Altman In contrast, other research has used the Z-Score to quantify financial hardship, making it the most used metric for assessing a company's financial health [78]. The study's z-score approach (Lepetit & Strobel, 2015) divided the company's financial status into three categories. A z-score less than 1.81 indicates financial difficulty, whereas a score more than 2.67 indicates strong or highly steady financial health. However, rather than engaging in opportunistic behavior, the probe focused on profit and unrestrained financial movement. Dechow, Kothari [79] introduced a free cash flow calculation approach in 1998. Previous studies have found a strong link between an organization's profitability potential, cash flow, and return on assets (ROA). This year's research also increased the ROI. Dechow, Hutton [80], found that when the return on assets (ROA) is high, managers may be more motivated to prioritize profit and emphasize the company's future potential. The study checks how well the system of checks and balances works by using [81] method to look at the debt ratio (total debt/total assets) as a measure of leverage. Researches by [42, 82, 83] have shown that the size and liquidity of a customer have a big effect on discretionary accruals when it comes to earnings management techniques. As a result, the analysis incorporates control variables like the organization's size and liquidity. When comparing variables, it uses basic descriptive statistics to get the median, standard deviation, and mean. The study uses regression analysis to test its hypotheses.

The regression model is as follows:

$$\text{Disc} - \text{Acrl}_{it} = \beta_0 + \beta_1 F - \text{Dist}_{it} + \beta_2 \text{FrCshFlw}_{it} + \beta_3 \text{PAT}_{it} + \beta_4 \text{LEV}_{it} + \beta_5 \text{SIZE}_{it} + \beta_6 \text{Lqd}_{it} + \varepsilon_{it} \text{----- Equation 1}$$

Where; Disc-Acrl stand for discretionary accouris, which also represent the earnings management aspect of reporting, F-Dist represents financial distress, calculated by using Altman Z-Score model, PAT represents Profits after taxation, while FrCshFlw stand for free cash flows of a company, LEV stands for leverage calculated by dividing debt by total equity of the company, SIZE represents overall size of company by virtue of its assets and last but not th least Lqd represents overall liquidity of the company calculated by adding the current assets of company after subtracting debtors and inventory.

4. Results and Discussion

4.1 Data and Sample size

The data for the present research consists of top 70 public companies listed on Amman Stock Exchange (ASE). The financial results of the companies from 2020 to 2024 were considered for the present research. The data was extracted from Thomson DataStream.

4.2 Results and Discussion

Evaluate and deliberate Table 1 displays descriptive statistics for all variables in the study, including the dependent, independent, and control variables. The descriptive statistical analysis clarifies the study's variables. The table below summarises the data for all variables in the study, including their means, standard deviations, and the lowest and maximum levels. The studies found evidence of profit management ranging from 0.000 to 0.210. The average value for earnings management is 0.041. [84] study discovered that the average profit management value was 0.165, indicating that this figure is lower. Nonetheless, it is marginally higher than the 0.0132 reported in [85].

Table 1. Results of Descriptive Statistic

	<i>N</i>	<i>Minimum</i>	<i>Maximum</i>	<i>Mean</i>	<i>St. Deviation</i>
<i>Disc-Acrl</i>	350	0.000	0.210	0.041	0.039
<i>F-Dist</i>	350	-0.002	3.013	0.512	0.396
<i>FrCshFlw</i>	350	-0.236	0.312	0.070	0.060
<i>PAT</i>	350	-0.220	0.192	0.201	0.068
<i>LEV</i>	350	0.000	1.561	0.237	0.197
<i>SIZE</i>	350	5.691	8.326	4.361	0.596
<i>Lqd</i>	350	-0.151	0.114	0.322	0.223

Source: Present Research

This illustrates that profit management is a common practice among Jordan's governmental enterprises. To be considered financially sound, a corporation's distress score must surpass 1.8; nevertheless, the average score is less than 0.512 [86]. According to the findings, 51.2% of the questioned businesses are in a precarious or challenging situation.

Table 2. Results of Multiple Linear Regression of the research model

<i>Model</i>	<i>Unstandardised Coefficient</i>		<i>Standardized Coefficient</i>	<i>t</i>	<i>Sig.</i>	<i>Tolerance</i>	<i>VIF</i>
	<i>B</i>	<i>St. Error</i>	<i>Beta</i>				
<i>(Constant)</i>	0.999	0.008	0	8.127	0.000		
<i>F-Dist</i>	-0.009	0.002	-0.08965	-2.960	0.001*	0.779	1.422
<i>FrCSH FL</i>	-0.027	0.020	-0.00367565	-0.893	0.422	0.437	2.533
<i>D/E</i>	0.040	0.006	0.1533015	4.079	0.000*	0.523	2.118

<i>PAT</i>	0.049	0.016	0.0869605	1.977	0.031*	0.383	2.892
<i>Frm-Size</i>	-0.012	0.002	-0.175714	-5.528	0.000*	0.735	1.508
<i>LiQ</i>	0.006	0.004	0.03586	0.927	0.265	0.497	2.229
<i>R Squared</i>	0.054						
<i>Adjusted R Squared</i>	0.048						
<i>F Change</i>	0.000						
<i>a. Dependent Variable</i>							
<i>b. Predictor: (Constant) F-Dist, FrCSH FL, D/E, PAT, Frm-Size, LiQ</i>							

Source: Present Research

The R-squared value indicates how the independent variables influence the variability of the dependent variable. The R-squared value demonstrates the extent to which the independent variable influences the dependent variable or elucidates its proportion. According to the study, F-Dist, FrCSH FL, D/E, PAT, Frm-Size, and LiQ account for 4.8% of the variation in earnings management. The study's model is clearly defined, as the results demonstrate. Nonetheless, it is worth noting that the R² value for this sort of accruals regression is usually quite low.

The facts in the table demonstrate the acceptance or rejection of hypotheses 1, 2, and 3. The study's initial assumption stated that opportunistic activities (FCF and PROFIT) would result in earnings management. The table results partially support H1, revealing profit as the only significant relationship ($p=0.031$, $p<0.05$). Because there is a positive link between the two, managers are more likely to overstate their reported earnings in order to capitalise on the company's already high profits. Managers will use earnings management to ensure the survival and continuity of operations during periods of low cash flow, owing to the inverse link between free cash flow and earnings management.

That is, the organisation is attempting to persuade the public that they can fulfil their duties without losing money. The negative consequences of admitting losses would motivate management to inflate reported earnings and deceive those who rely on them. The evidence supports H2 ($p = 0.000$, $p < 0.05$). H2 asserts a relationship between monitoring and earnings management. Leverage-proxied monitoring methods exhibit a strong and positive link, contradicting the previously believed negative correlation between monitoring systems and earnings management. More strict external monitoring measures make managers less likely to engage in earnings management. Financial distress, a proxy for pressure behaviour, shows a significant value of $p=0.001$, $p<0.05$ (H3 results). Given the unfavourable relationship between financial distress and earnings management, it is reasonable to assume that managers manipulate earnings when the company is performing well and act differently during challenging times. In line with the findings of [86], our study also discovered that the primary reason distressed firms do not engage in earnings management is because they have likely exhausted all options to increase profits before engaging in activities pertaining to earnings management, and the findings of our study is in line with earlier held findings of [85, 87] and [88].

5. Conclusions

This empirical analysis used data from 70 of Jordan's top publicly traded companies from 2020 to 2024. After testing all hypotheses, such as those about normality, cleaning up missing data, leaving out financial institutions, and getting rid of outliers, regression was used to look at the year-end observations from the remaining 350 firms. We kept two hypotheses (H2 and H3) and rejected one (H1). When the company is doing well financially, managers will use earnings management strategies. Earnings manipulation reduces the quality and dependability of reported earnings numbers, which obscures the company's operational success. If investors got biased information, it would jeopardize the functioning of financial markets, negatively damaging their decision-making processes. This has raised concerns among lawmakers and authorities. Economic officials have put in place rules and regulations to protect data users' interests while making decisions.

Jordan's reform plan prioritised improved safeguards for lenders and borrowers. The country implemented uniform legislation for secured transactions, as well as a centralised, notice-based collateral registry with regional consolidation. Jordan's private credit bureau has completed measures that will allow borrowers, banks, and other financial institutions to obtain credit ratings. Jordan received an exemplary score of 95 in the Doing Business category, which evaluates the availability of business loans. This achievement put the country in fourth place, after the United States and Australia. Dalia Wahba, IFC Manager for the Levant, stated that "Jordan is among the top ten reformers internationally this year." "It marks an important milestone." The reforms eliminate bureaucracy, considerably increasing productivity in the business environment. Collectively, these efforts represent a Jordanian government initiative to attract new investors, improve national competitiveness, and stimulate private sector growth.

This investigation is subject to various constraints. Initially, [89]questioned the study's reliability due to its reliance on a single accrual model. According to [90], using several accrual models helps reduce the likelihood of errors when calculating discretionary accruals. In contrast, the alternative accrual models will be extremely difficult, if not impossible, to construct within the available timeframe. Second, unlike the other studies, this study found that the three-year period with the final sample of 1,166 firms' annual observations was insufficient. Due to data restrictions, this study focused primarily on the entire sample corporation, excluding financial institutions. This study is broad in scope, with no focus on a single sector or firm size. The results may differ if the study used a sample from a different industry or organizational size. The dimensions of the industry and organization may influence the variable's specific qualities and magnitude. As a result, the researcher may anticipate more thorough and definitive conclusions regarding the variable under investigation.

Businesses in Jordan that face financial difficulties while remaining viable can now reorganise and restructure their obligations thanks to new insolvency rules. Jordan also supported the dignified withdrawal of faltering businesses from the market. Jordan has finally adopted electronic registration and payment for labour taxes and other necessary contributions, saving businesses time in meeting their financial obligations. Furthermore, corporations were required to make only nine payments per year, rather than twenty-three. Jordan can accomplish significant future advancement by focusing on business rules such as obtaining building permissions (ranked 138th) and founding a corporation.

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