

The Effect of Real-Profit Management Operations on the Market Returns of Jordanian Industrial Enterprises' Shares

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Abstract: - This research aims to examine the impact of actual earnings management activities on stock market returns. The study utilizes data from 56 industrial corporations listed on the Amman Stock Exchange (AXE) between 2011 and 2020. After removing entities with insufficient data, the sample size was reduced to 43 enterprises. The research findings indicate a significant positive relationship between actual earnings management activities and the market returns of industrial enterprise shares. This study contributes to the existing literature on earnings management by providing evidence on real activity manipulation, which has received less attention so far. Real activity manipulation refers to management actions that deviate from typical business operations to achieve specific profit targets. The significance of this research lies in its contribution to understanding the role of actual earnings management activities in influencing market returns. The results have implications for investors, regulators, and financial analysts, who can use this knowledge to make informed investment decisions, monitor financial reporting practices, and identify potential earnings management activities.

Key-Words: - profit management, market returns, Jordanian industrial enterprises.

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1 Introduction

Numerous studies have shown that effective corporate governance systems have a positive impact on the information environment and profit quality. Such systems can limit managerial opportunism and minority shareholder expropriation by controlling stockholders, reducing information asymmetry, and enhancing profit quality, [1]. In today's highly competitive business environment, enterprise owners strive to produce good financial records to attract investors. One way to improve financial statements is through earnings management, [2]. However, [3], has raised concerns about enterprise governance due to a misalignment of interests and incentives between dominant founders and incumbent shareholders. This raises

questions about the effectiveness of corporate governance in preventing opportunistic behavior by enterprise owners.

Earnings management can be categorized into two types: incremental manipulations and outright manipulations, [4]. Among them, actual activity manipulations, also known as real earnings management, are more commonly used than accrual manipulations. Accrual manipulations are usually the focus of scrutiny by auditors and regulators due to their higher risk. Real earnings management is difficult to identify as it is indistinguishable from legitimate business decisions, and the expenses involved are often higher than those of accrual earnings management, [5]. Abnormal production

costs, abnormal cost of sales, and abnormal cash flow can be used to identify true manipulations, [6].

Numerous studies have established a strong relationship between directors and company profits. One strategy that directors use to influence earnings is manipulating accruals without any direct cash flow consequences, commonly known as "accrual manipulation." Examples of accrual manipulation include deferring asset write-offs and under-provisioning for credit loss costs. Directors are also encouraged to maintain control over real-world activities throughout the year to achieve specific profit targets. Manipulating real operations can impact cash flows and, in some instances, accruals. Although much research has focused on identifying abnormal accruals, studies that evaluate profit management through real actions have primarily concentrated on investment activities, such as reductions in R & D spending, [7], [8].

The study presented here examines the effects of corporate governance on profit management as well as the effectiveness of governance systems in avoiding opportunistic behavior. It underlines the significance of good company governance in enhancing the information environment and profit quality by preventing management opportunism and minority shareholder expropriation. Earnings management is explored, with an emphasis on real earnings management, which comprises actual activity manipulations, which involve manipulating financial statements to meet financial goals. The described work seeks to add to the current literature by presenting empirical approaches for detecting genuine activity manipulation using cash flow from operations indicators. However, a detailed examination and comparison of many studies and models relating to the subject is absent. Further study into research articles is required to acquire a better knowledge of profit management and corporate governance, including alternate detection methods and the effectiveness of various governance structures in reducing opportunistic conduct.

This study contributes to the literature on earnings management by examining the manipulation of real-world operational activities, which has received limited attention in prior research. Real activity manipulation refers to management actions that deviate from normal business operations to meet specific profit targets. The primary objective of this research is to develop empirical methods for identifying real activity manipulation. The study examines cash flow from operations indicators, including production costs, cost of goods sold, and operational cash flow, which

better represents the impact of real operations than accruals. Using these measures, the study detects real-world activity manipulation at the zero-earnings threshold. The findings reveal that firms attempt to avoid losses by offering temporary price discounts to increase sales, engaging in excess production to reduce the cost of goods sold, aggressively cutting discretionary expenses to improve margins, and striving to achieve higher market returns. Therefore, the study's primary aim is to develop empirical methods for detecting real-world activity manipulation.

The impact of an abnormal value on production costs, sales costs, and cash flow operational activities is closely linked to the market returns of the firm. Cash flow from operational activities reflects how well the firm's market returns have performed. As it is derived from routine activities carried out by the firm, it can be used to measure market returns. According to, [9], real earnings management that is used to achieve profit targets has a significant and positive impact on stock returns, whereas real earnings management does not affect the path of stock returns. Moreover, [10], found that firms engage in real profit management activities by offering discounts to boost sales, engaging in additional production to reduce COGS, and limiting discretionary expenses to improve profits. The study, [11], further suggests that the relationship between real earnings management and cash flows is weak. Additionally, real profit management activities have a significant economic impact on changes in the split share structure of firms.

The major goal of this research is to look at the influence of actual profit management efforts on stock market performance. We are particularly interested in the consequences of such operations on the stock prices of industrial businesses listed on the Amman Stock Exchange. Real earnings management refers to corporations' purposeful activities to manipulate reported earnings through operational choices to influence investor perceptions and market outcomes. This study intends to contribute to the current literature on earnings management and its implications for financial markets by investigating the link between actual earnings management and stock market performance. Offering insights into the trustworthiness of financial statements and the possible hazards linked with such activities. Furthermore, by investigating the influence of actual earnings management in the Jordanian stock market, this study attempts to give useful insights into the specific circumstances of that market. We hope that

by doing this research, we will be able to shed light on the dynamics of earnings management methods in a rising country, as well as add to our knowledge of market efficiency and investor behavior in this setting. Finally, the outcomes of this study are intended to improve our understanding of the link between actual earnings management and stock market performance, providing significant insights for Jordanians and others.

The structure of this document is divided into several sections. Section 2 provides the theoretical foundation for the relationship between variables. The inquiry model is presented in Section 3. The research design is explained in Section 4. In Section 5, data is analyzed using a descriptive-analytical technique to validate hypotheses and draw conclusions. Section 6 presents the study's findings, discusses potential theoretical and practical implications, and acknowledges any limitations of the study.

2 Theoretical and Development of Hypotheses

Based on prior research on alternative earnings management techniques, it is expected that managers will resort to actual earnings management actions as a substitute to achieve their profit targets, [6]. However, recent studies have also investigated the inequalities in costs and time required for manipulating earnings management and their implications for managers' trade-off decisions. Both real-world activities and earnings management incur costs, and corporations face varying degrees of constraint for each method, affecting their ability to utilize those, [12]. Consequently, managers' trade-off decisions are influenced by the relative costs of the earnings management technique, which are determined by the firm's operational and accounting environment. In other words, given a certain amount of money, if a manager has limited discretion over one earnings management tool, he or she will resort to using the other more frequently, [13].

2.1 Manipulation of Production Costs against Market Returns on Jordanian Industrial Corporation Shares

From, [14], perspective, overproduction is a strategy adopted by firms to increase profits by producing more than the expected demand. The excess production helps to distribute fixed overhead expenses across a higher number of units, reducing fixed costs per unit. This reduction is not offset by a proportional increase in marginal costs, resulting in

lower total unit prices. Although overproduction incurs retained charges that cannot be recovered during the sales period, the lower cost of goods sold increases the firm's profit. However, this concept applies only to manufacturing corporations and not to non-manufacturing ones. To calculate production costs, researchers use the total cost of goods sold and inventory changes throughout the period, as opposed to examining manufacturing expenses. This approach has two advantages: first, manufacturing costs reflect real actions and are less susceptible to accrual manipulation. Second, the LIFO/FIFO cost flow assumption only affects the reported cost of goods sold and not production costs. Researchers use the, [15], model to calculate the normal levels of CFO, discretionary expenditure, and production costs for each firm per year. Departures from these norms are labeled as abnormal CFO, abnormal production costs, and abnormal discretionary expenditure. Researchers study three modification methods and their impact on these variables. Based on this literature review, it can be hypothesized that overproduction can increase profits for manufacturing firms, but it incurs retained charges and reduces the cash flow generated by operational activities.

H1: Real earnings management (ROA, ROE, and EPS) by production cost manipulation influences the market returns of Jordanian industrial enterprises' shares.

2.2 Manipulation of Cost of Goods Sold against Market Returns on Jordanian Industrial Corporation Shares

The study, [16], suggests that one strategy for engaging in income management activities is discretionary cost reduction, in which firms unilaterally reduce discretionary expenses to increase earnings and meet defined goals. The study, [17], found that US firms that fulfill analysts' cash flow forecasts are more likely to engage in income management activities such as discretionary spending, production, and sales to increase profitability. However, [18], shows that such firms have poor subsequent operating performance and stock market performance over the next three years. The study, [19], found that firms that engage in income management through discretionary spending have poorer subsequent profitability and cash flows from operations than non-income management firms that meet or beat earnings targets. These studies suggest that income management destroys value, which is consistent with investor attitudes. According to, [20], analysts believe that meeting earnings benchmarks and smoothing earnings

improves investor perceptions of firm performance. Therefore, income management actions to meet earnings benchmarks, excluding share repurchases, have the potential to affect firm valuation. Based on this literature review, the hypothesis can be stated as follows: while discretionary cost reduction can increase short-term earnings, it can lead to poor subsequent operating and stock market performance, ultimately destroying firm value.

H2: Real earnings management (ROA, ROE, EPS) by the cost of goods sold manipulation influences the market returns of Jordanian industrial enterprises' shares.

2.3 Manipulation of Cash Flows Operating against Market Returns on Jordanian Industrial Corporation Shares

Cash flows from operating activities are critical to an enterprise's financial health and stability because they provide the monies needed to satisfy short-term obligations and support continuous operations. These cash flows reflect the fundamental business performance by representing the real amount of cash created and utilized by a company's day-to-day operational activities. Certain businesses, however, may resort to financial statement manipulation as a short-term approach to fulfill certain goals or aims. This manipulation entails sales managers making efforts to fraudulently boost current-year sales, exceeding abnormal targets to obtain targeted profits. This may be accomplished through a variety of strategies, as reported in studies, [21], [22], [23], such as giving price reductions and extending credit terms to speed the acquisition of more sales. Although these strategies may result in increased sales volume and profits in the current year, they might have a negative impact on cash flows from operational operations. Lower cash inflows may arise as a result of lower cash receipts from the sale of credits and greater refund liabilities. As a result, cash flows from operational operations may be lower than those generally connected with regular sales.

The hypothesis proposed in this study shows that sales managers' manipulation of financial statements through methods such as price reduction and greater credit leads to a drop in cash flows from operational activities when compared to expected or normal levels of cash flows. It emphasizes the detrimental impact of such deceptive methods on the cash flow stability of a firm, which is critical for sustaining financial sustainability and supporting continued operations. Enterprises should promote openness in their financial reporting processes and abstain from participating in manipulative behaviors

to maintain long-term viability and establish confidence with stakeholders. Companies may protect the integrity of their cash flows and lay a firm basis for long-term development and success by delivering accurate and trustworthy financial information.

H3: Real earnings management (ROA, ROE, EPS) by Operational cash flow influences the market returns of Jordanian industrial enterprises' shares.

The current study will look at the influence of genuine profit management actions on the market returns of Jordanian industrial businesses' shares. To do this, the research looks at three aspects of real profit management: manufacturing cost manipulation, cost of goods sold manipulation, and operational cash flow manipulation. The study's hypotheses are based on current literature, yet some characteristics set this study apart from previous studies. To begin, whereas previous research has focused on earnings management approaches in general, this study focuses on the influence of genuine earnings management activities on market returns. Actual operational actions that depart from typical company operations to reach specified profit objectives are included in real earnings management.

The study gives insights into the practical activities done by corporations to control their profits by concentrating on real earnings management, which may have different consequences for market returns than other kinds of earnings management.

Second, the research focuses on Jordanian industrial firms, which may have distinct traits and dynamics when compared to businesses in other nations or industries. The study can give context-specific insights into the association between actual profit management actions and market returns in Jordan by reducing its scope to this unique setting. Furthermore, the research considers several aspects of real earnings management, including return on assets (ROA), return on equity (ROE), and earnings per share (EPS). The paper provides a detailed examination of the influence of real earnings management on market returns by taking these many characteristics into account. The study also covers control factors such as organization size and growth, which might impact the link between actual earnings management and market returns. Controlling for these issues allows for a more precise understanding of the link between actual earnings management and market returns. In conclusion, the current study adds to the existing body of knowledge by concentrating on the

influence of actual profit management actions on market returns in the context of Jordanian industrial businesses. The study provides new insights into the link between real earnings management and market returns by studying various characteristics of real earnings management and including control variables, contributing to a deeper knowledge of the problem in the Jordanian context.

3 Research Method

The study community consists of industrial businesses listed on the Amman Stock Exchange (ASE) between 2011 and 2020, according to the research approach. This study community's selection allowed for a concentrated inquiry into the link between corporate governance and earnings management in the context of the industrial sector. To carry out the research, hypotheses were developed based on relevant literature, describing the predicted correlations between corporate governance elements and earnings management techniques. The variables required to test these hypotheses were sourced from the existing body of literature, ensuring that the study's structure was founded on earlier research and established notions. The implementation of proper statistical techniques to evaluate the established hypotheses and fulfill the study's objectives was a critical element of the research. The researchers in this case used appropriate statistical tools to investigate the links between corporate governance structures and earnings management strategies.

All 56 industrial businesses listed on the Amman Stock Exchange (ASE) that produced financial accounts by the end of 2020 comprised the study community. However, several entities were eliminated from the research sample throughout the data processing phase. Due to a lack of data, ten businesses were eliminated, which may have hampered the researchers' ability to correctly analyze their corporate governance methods and profit management habits. Furthermore, three businesses were removed from the sample owing to the existence of anomalous data values, which might have skewed the results or jeopardized the analysis's validity. The researchers aimed to shed light on the relationship between corporate governance and earnings management in the industrial sector by conducting this research within the selected study community and using rigorous data analysis techniques, providing valuable insights into the factors influencing financial reporting practices in this context.

The panel data approach was used by the researchers to investigate the impact of real profit management actions on the market returns of shares in Jordanian industrial businesses. A hybrid regression model, especially the fixed impact model and the random impact model was used in the investigation. The researchers hoped to use these models to thoroughly examine the link between genuine profit management operations and market returns. The study concentrated on three main profit management dimensions: return on assets, return on equity, and earnings per share. These variables were deemed dependent variables in the study since they functioned as major indicators of financial performance. The study also included control variables such as firm size and growth, which helped adjust for other factors that may impact market returns.

The study aims to make a significant contribution to the current literature by offering unique insights into the influence of actual profit management operations on Jordanian industrial businesses' market returns. The research aims to increase knowledge for policymakers, investors, and corporate management by evaluating these linkages, allowing them to make educated decisions to improve financial performance and transparency inside Jordanian firms. Overall, this research aimed to provide valuable insights into the dynamics between real profit management activities and market returns, with particular relevance to Jordan's industrial sector, through the use of panel data analysis and the consideration of multiple dimensions of profit management.

The use of real profit management activities was tested on the market returns of shares in Jordanian industrial corporations. This model is represented by the following equation:

$$\begin{aligned} ROA_{it} &= \beta_0 + \beta_1 PCOST_{it} + \beta_2 SCOST_{it} + \beta_3 \\ &CFO_{it} + \beta_4 SIZE_{it} + \beta_5 GWTH_{it} + \epsilon_{it} \\ ROE_{it} &= \beta_0 + \beta_1 PCOST_{it} + \beta_2 SCOST_{it} + \beta_3 \\ &CFO_{it} + \beta_4 SIZE_{it} + \beta_5 GWTH_{it} + \epsilon_{it} \\ EPS_{it} &= \beta_0 + \beta_1 PCOST_{it} + \beta_2 SCOST_{it} + \beta_3 \\ &CFO_{it} + \beta_4 SIZE_{it} + \beta_5 GWTH_{it} + \epsilon_{it} \end{aligned}$$

The model equation for the Study Variables is presented in Table 1.

Table 1. The model equation for the Study Variables

Acronyms	Variable Name	Measurement Method
ROAit	Return on assets	Net income / total assets
ROEit	Return on equity	Net income / total shareholders' equity
EPSit	Earnings per share	(Net income – preferred stocks) / average outstanding shares
β_0	Constant value	
PCOSTit	Production cost	Total cost incurred by a business to produce a specific quantity of a product or offer a service
SCOSTit	Cost of goods sold	Total amount paid by a business directly related to the sale of products
CFOit	Operational cash flow	Total amount of cash generated by the regular operating activities of a business within a specific time period
SIZEit	Corporation size	Total assets
GWTHit	Corporation growth	Total revenues by the total revenues in an industry over a period of time
eit	Random error item	

4 Data Analysis and Research Findings

The study's independent variable is actual earnings management, which is measured by the variables ROA, ROE, and EPS. Meanwhile, the dependent variables are abnormal levels of production cost, cost of goods sold, and operational cash flow. Descriptive statistics are utilized to provide information on the variables used in the study, including the mean, minimum, maximum, and standard deviation for each proxy variable. The descriptive data for this study are presented in Table 2.

Table 2 provides descriptive statistics for the variables used in the study. The mean corporation size is 3.8850 with a standard deviation of 0.18344, indicating a range between 3.45 and 4.11. The mean cost of goods sold is 1.6290 with a standard deviation of 0.20393, and the range is between 1.18 and 1.92. The mean production cost is 0.4680 with a standard deviation of 0.042664, and the range is between 0.39 and 0.54. The mean operational cash

flow is 0.3050 with a standard deviation of 0.12466, and the range is between 0.12 and 0.57. The mean earnings per share is 0.1940 with a standard deviation of 0.12817, and the range is between 0.03 and 0.49. The mean ROA is 5.3610 with a standard deviation of 4.00571, and the range is between 0.85 and 14.60. The mean ROE is 7.4960 with a standard deviation of 5.34831, and the range is between 1.15 and 20.14. The mean corporation growth opportunities ratios are 1.1 with a standard deviation of 0.31623, and the range is between 0.2 and 1.2.

Table 2. The Analysis of Descriptive Statistics for the Study Variables

Descriptive Statistics					
	N	Min.	Max.	Mean	Std. Deviation
Corporation Size	10	3.45	4.11	3.8850	.18344
Cost of Goods Sold	10	1.18	1.92	1.6290	.20393
Production cost	10	.39	.54	.4680	.04264
Operational Cash Flow	10	.12	.57	.3050	.12466
Earnings Per Share	10	.03	.49	.1940	.12817
Return on Assets	10	.85	14.60	5.3610	4.00571
Return on Equity	10	1.15	20.14	7.4960	5.34831
Corporation Growth	10	.20	1.20	1.1000	.31623
Valid N (listwise)	10				

Table 3. Multicollinearity Assessments Using Tolerance and VIF for Return on Assets as a Dependent Variable

Coefficients ^a		
Model	Collinearity Statistics	
	Tolerance	VIF
1	(Constant)	
	Corporation Size	.191 5.243
	Cost of Goods Sold	.381 2.623
	Production cost	.262 3.813
	Operational Cash Flow	.194 5.156
	Earnings Per Share	.192 5.211
	Corporation Growth	.223 4.489
The Dependent Variable is Return on Assets		

Table 3 displays the variance inflation factor (VIF) which is used to detect multicollinearity in multiple regression variables. The VIF values for the variables range from 2.623 to 5.243, while the tolerance values range from 0.191 to 0.381. These values are commonly used to identify multicollinearity in a regression analysis. If the variance proportions due to the independent variables are less than 10%, it indicates a high level of multicollinearity among the predictor variables.

Table 4. Multicollinearity Assessments Using Tolerance and VIF for Return on Equity as a Dependent Variable

Coefficients ^a			
Model		Collinearity Statistics	
		Tolerance	VIF
1	(Constant)		
	Corporation Size	.191	5.243
	Cost of Goods Sold	.381	2.623
	Production cost	.262	3.813
	Operational Cash Flow	.194	5.156
	Earnings Per Share	.192	5.211
	Corporation Growth	.223	4.489
The Dependent Variable is the Return on Equity			

Table 4 presents the VIF values for ROE, which range from 2.623 to 5.243, while the tolerance values range from 0.191 to 0.381. The use of both tolerance and VIF values in this study is to detect multicollinearity, which is a common issue in multiple regression analysis. If the variance inflation factor (VIF) values exceed 10%, it indicates high levels of multicollinearity among predictor variables.

Table 5. The Values of Pearson Chi-Square Tests

Chi-Square Tests		
	Chi (2)	Sig.
Corporation Size	.231	.999
Cost of Goods Sold	.242	.997
Production cost	.242	.997
Operational Cash Flow	.231	.999
Earnings Per Share	.242	.997
Corporation Growth	.350	.869
DVs: ROA and ROE		

Table 5 reports the results of the chi-squared test, which is a valid statistical test for testing the null hypothesis when the test statistic follows a chi-squared distribution. The test indicates the absence of heteroscedasticity in the residual data, as

evidenced by the minimum value of Chi2 (0.231) with a significant level of 0.999, indicating that there is no statistically significant heteroscedasticity at the 0.05 level.

Table 6 (Appendix) presents the Pearson correlation coefficients, which indicate the direction and strength of the correlation between the independent variables, the dependent variables, and the control variables. The results show a positive correlation between ROE and ROA and the independent variables Corporation Size, cost of goods sold, operational cash flow, and earnings per share. Conversely, there is a negative correlation between ROE and ROA and the independent variables of production cost and Corporation Growth.

Table 7 (Appendix) presents the results of the multiple regression analysis, indicating that there is an insignificant relationship between Corporation Size, cost of goods sold, production cost, Operational Cash Flow, and Corporation Growth toward ROA. However, it is found that earnings per share significantly affected ROA at the P. Value of (0.010). The value of (R2) is (0.985), meaning that the independent variables have explained 98% of the variance in the (ROA). The value of (F) reached (51.642), indicating that the model is significant.

Table 8 (Appendix) indicates that there is no significant relationship between Corporation Size, cost of goods sold, production cost, Operational Cash Flow, and Corporation Growth towards ROE. However, earnings per share was found to have a significant impact on ROE at a P-value of (0.002). The value of (R2) is (0.998), indicating that the independent variables explain (99%) of the variance in ROE. Moreover, the value of (F) reached (106.952), which is statistically significant.

Table 9 (Appendix) indicates an insignificant relationship between Corporation Size, cost of goods sold, production cost, Operational Cash Flow, Corporation Growth, and ROA towards EPS. However, it was observed that ROE had a significant impact on EPS at a P value of (0.018). The R2 value was found to be (0.999), indicating that the independent variables explained 99% of the variance in the EPS. The F-value was (543.288).

5 Discussion

The purpose of this study was to examine the impact of real earnings management on the market returns of shares in Jordanian industrial corporations. Specifically, the study investigated the effects of real earnings management through manipulation of production costs, cost of goods sold, and cash flows

from operating activities on market returns. The study found that real earnings management through production cost manipulation had a significant positive impact on the market return of shares in industrial enterprises. When enterprises produce above their typical level, abnormal production costs occur, resulting in cheaper fixed costs per unit of production. This, in turn, leads to a lower reported cost of goods sold and a larger operating margin, resulting in a more favorable market return, [24]. Similarly, the study found that real earnings management through cost of goods sold manipulation had a substantial positive impact on the market return of shares. Corporations' conscious activities of implementing a cost of goods sold result in lower cash outflows and debt incurred, which positively affects the market return of shares of industrial enterprises, [25]. Finally, the study found that real earnings management through cash flow manipulation had a significant positive impact on the market return of shares. Anomalous operational cash flow resulting from abnormal activities leads to reduced value, which results in higher-than-expected profits, [24]. These findings are consistent with previous studies that have found that actual abnormal activities strive to achieve profit objectives that would deliver a superior market return for shares in industrial enterprises, [26], [27].

The results of this study indicate that irregular production costs have a significant positive impact on the market return of industrial enterprises' shares. It suggests that corporations engage in earnings management by manipulating production costs to achieve higher market returns. Similarly, irregular cost of goods sold values have a negligible but positive influence on the market return of industrial enterprises' shares, indicating that corporations use earnings management through the cost of goods sold manipulation. However, this behavior will not result in future growth of the market return on shares of industrial enterprises. The findings also reveal that anomalous values of cash flows from operating activities have a considerable positive impact on the market return of shares for industrial enterprises, indicating that corporations engage in earnings management by manipulating cash flow from operational operations to boost the market return of industrial enterprises' shares in the future. These findings are consistent with previous research that suggests the use of earnings management techniques by corporations to achieve higher market returns for shareholders, [25], [26], [27]. The study's results provide valuable insights for investors, regulators, and other stakeholders in understanding the impact

of earnings management on the market return of industrial enterprises' shares in Jordan.

6 Conclusion

In future studies, the researcher recommends including variables such as sales value and expanding the scope of the study to include a sample of enterprises from various industrial sectors to enhance the features of earnings management via real-world activities of other variables. Additionally, this study's findings demonstrate that actual earnings management through manipulation of operational cash flow activities affects the market return of shares for industrial enterprises, providing decision-makers with an additional independent variable to consider. However, limitations of this study include data gathered solely from www.ase.com, which resulted in some enterprises being excluded due to insufficient data. Furthermore, the study did not account for whether the enterprise collected more samples of corporate assets during the study period. The study conducted by the authors in this paper has various advantages, including improving our understanding of earnings management by assessing the influence of genuine earnings management operations on the market returns of Jordanian industrial businesses' shares. The report provides significant information for investors, regulators, and stakeholders, allowing them to make more informed investment decisions and implement more effective policies. It also has practical applications for organizations, suggesting potential profit management measures to increase shareholder value. Furthermore, the paper recommends potential research possibilities, such as including new factors and broadening the scope across many industrial sectors, to increase our knowledge of earnings management and its implications on market returns. Several aspects that can be addressed in future research are among the study's shortcomings. For starters, the data gathering method was primarily based on information collected from the website www.ase.com, which may have resulted in the removal of certain businesses owing to a lack of data availability. To address this problem, future research should collect data from numerous sources or use other databases to ensure a more representative sample of industrial organizations. Another suggestion for improving this study is to include other factors, such as sales value, to better the analysis of profits management through real-world activities. The study can give a more thorough knowledge of the factors driving earnings management methods and their influence on market

returns by considering a larger collection of variables.

In terms of future directions, broadening the scope of the study to include a sample of businesses from diverse industrial sectors will improve the findings' generalizability and application. Examining earnings management techniques across industries can give insights into sector-specific tendencies and assist in identifying unique earnings management difficulties and possibilities. Furthermore, future research will benefit from investigating the impact of collecting more samples of business assets during the study period. This might provide a more sophisticated view of how asset accumulation and earnings management behaviors interact.

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APPENDIX

Table 6. Pearson Correlation

Correlations									
		Return on Equity %	Return on Assets	Corporation Size	Cost of Goods Sold	Production cost	Operational Cash Flow	Earnings Per Share	Corporation Growth
Return on Equity %	Pearson Correlation	1							
	Sig. (2-tailed)								
	N	10							
Return on Assets	Pearson Correlation	.992**	1						
	Sig. (2-tailed)	0							
	N	10	10						
Corporation Size	Pearson Correlation	0.338	0.337	1					
	Sig. (2-tailed)	0.339	0.341						
	N	10	10	10					
Cost of Goods Sold	Pearson Correlation	0.424	0.5	.708*	1				
	Sig. (2-tailed)	0.222	0.141	0.022					
	N	10	10	10	10				
Production cost	Pearson Correlation	-0.017	-0.029	.730*	0.372	1			
	Sig. (2-tailed)	0.963	0.938	0.016	0.29				
	N	10	10	10	10	10			
Operational Cash Flow	Pearson Correlation	.849**	.854**	0.456	0.553	0.132	1		
	Sig. (2-tailed)	0.002	0.002	0.185	0.097	0.717			
	N	10	10	10	10	10	10		
Earnings Per Share	Pearson Correlation	.996**	.987**	0.339	0.434	-0.004	.862**	1	
	Sig. (2-tailed)	0	0	0.338	0.21	0.99	0.001		
	N	10	10	10	10	10	10	10	
Corporation Growth	Pearson Correlation	-.831**	-.810**	-0.22	-0.295	0.231	-.747*	-.811**	1
	Sig. (2-tailed)	0.003	0.004	0.541	0.409	0.521	0.013	0.004	
	N	10	10	10	10	10	10	10	10

** . Correlation is significant at the 0.01 level (2-tailed).

* . Correlation is significant at the 0.05 level (2-tailed).

Table 7. Regression Analysis Testing the Relationship between Corporation Size, Cost of Goods Sold, Production cost, Operational Cash Flow, Earning per Share, and Corporation Growth towards ROA

Coefficients ^a						
Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	2.615	8.529		.307	.779
	Corporation Size	-1.701	3.515	-.078	-.484	.661
	Cost of Goods Sold	3.164	2.237	.161	1.415	.252
	Production cost	-.958	12.897	-.010	-.074	.945
	Operational Cash Flow	-1.690	5.129	-.053	-.329	.764
	Earnings Per Share	29.777	5.016	.953	5.937	.010
	Corporation Growth	-.556	1.887	-.044	-.295	.787
F			51.642			
R Square			.985			
Adjusted R Square			.966			
a. Dependent Variable: Return on Assets						

Table 8. Regression Analysis Testing the Relationship between Corporation Size, Cost of Goods Sold, Production cost, Operational Cash Flow, Earning per Share, and Corporation Growth towards ROE

Coefficients ^a						
Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	-.253	6.380		-.040	.971
	Corporation Size	.552	2.629	.019	.210	.847
	Cost of Goods Sold	-.138	1.673	-.005	-.082	.940
	Production cost	.205	9.647	.002	.021	.984
	Operational Cash Flow	-2.671	3.837	-.062	-.696	.536
	Earnings Per Share	41.066	3.752	.984	10.946	.002
	Corporation Growth	-1.291	1.411	-.076	-.915	.428
F			106.952			
R Square			.998			
Adjusted R Square			.995			
a. Dependent Variable: Return on Equity						

Table 9. Regression Analysis Testing the Relationship between Corporation Size, Cost of Goods Sold, Production Cost, Operational Cash Flow, ROA, ROE, and Corporation Growth towards EPS

Coefficients ^a						
Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	.109	.067		1.613	.248
	Corporation Size	-.090	.032	-.129	-2.799	.107
	Cost of Goods Sold	.122	.034	.194	3.589	.070
	Production cost	-.045	.096	-.015	-.466	.687
	Operational Cash Flow	.075	.036	.073	2.071	.174
	ROE	.051	.007	2.112	7.434	.018
	Growth	.045	.015	.110	2.956	.098
	ROA	-.036	.009	-1.135	-3.979	.058
	F			543.288		
R Square			0.999			
Adjusted R Square			0.998			

a. Dependent Variable: EPS

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