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Impact of profitability on investment opportunities and its effect on profit sustainability

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ABSTRACT

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This study aimed to clarify the relationship between profitability, investment opportunities, and sustainable profits for industrial companies listed on the Amman Stock Exchange. The population consisted of all 53 industrial companies on the Exchange in 2022. Financial data was obtained for the period 2018-2022, including metrics on investment opportunities and profitability. Using statistical analysis like regression testing, we assessed the data to test hypotheses and reveal insights. Existing research presents mixed findings; some studies suggest a positive link between investment chances and financial performance and profit durability, while others make the opposite claim. Our results contribute uniquely to this ongoing debate by providing statistical evidence that investment opportunities have a robust, positive impact on profit sustainability. Additionally, profitability strongly influences both investment opportunity indicators and profit sustainability for these industrial companies. These conclusions assist stakeholders in justifying financial acquisitions and allocating capital to potential investments. The findings also aid in shaping short and long-term investment approaches aligned with company goals and policies. This can increase value creation for shareholders by enhancing profitability and sustaining profits over time. In summary, by quantitatively demonstrating the interconnected nature of profitability, investment opportunities and durable profits, this study equips decision makers to make informed strategic choices that promote growth and sustainability. The analysis methods and results add valuable insights to academic and practical understanding of these relationships within Jordan's industrial sector.

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1. Introduction

Profitability critically indicates a company's competitiveness, management quality, and resource utilization (Chowdhury et al., 2018). By signaling the ability to increase capital, bear risk, and provide investor returns, profits reflect the net results of policies and decisions (Nguyen & Nguyen, 2020). Fundamentally, businesses aim to maximize profits and shareholder wealth to ensure continuity and positively impact their financial position amidst external challenges like competition, risk, and internal dynamics (Momeni et al., 2018). As industrial companies spend substantially to achieve acceptable profits, profitability measures efficiency and optimal resource use. Sustainable profits align with continually deploying resources towards lucrative investments. As profitability rises, companies can divert more capital into high-yield opportunities, thus enhancing long-term profitability (Djalil et al., 2007).

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Investment opportunities represent available options for value enhancement and profit retention. Expectations of earnings growth provide positive incentives to pursue further investments (Djalil et al., 2017). Profits critically enable business survival and continuity, building stakeholder confidence. As a key efficiency metric, profits benchmark management's success in utilizing resources (Singhania & Seth, 2010). In demonstrating capital efficiency, profitability signals proper strategic direction. By motivating investor and resource commitment, profits exhibit progress (Rizqia et al., 2017). As a qualitative benchmark, profits relative to investments judge efficiency in generating sustainable returns from deployed resources over time (Anggi et al., 2019). Financial performance receives significant attention for illuminating the drivers of profitability, which investors scrutinize as a metric of success and development (Murniati et al., 2019).

This study primarily aims to demonstrate how profitability impacts investment opportunities and consequently influences profit sustainability for Amman Stock Exchange listed industrial companies. The analysis provides guidance for stakeholders seeking to justify financial decisions and structure approaches for long-term, value-accretive investments.

2. Study Problem and Questions

Effective resource management is fundamental to business success and sustainability. Imbalanced cash flows pose financial issues regardless of surplus or deficit status. Surpluses represent unutilized funds incurring lost opportunity costs, so companies must pursue acceptable, continuous returns on investment (Momeni et al., 2018). Conversely, deficits indicating outgoing exceeds incoming cash flows may undermine liquidity, hindering obligations, operations, and emergency reserves while risking distress - all jeopardizing profitability and retention (Salman et al., 2017). Low profits often stem from improper asset management, unbalancing funding sources and uses. Consequences include lost growth avenues and investment freedom potentially leading to bankruptcy. High profits are also linked to resource mismanagement and imbalanced financial flows (Chowdhury et al., 2018). However, strong profits built on expansion and investment can produce acceptable, sustainable growth (Chowdhury et al., 2018).

Achieving adequate profits represents a persisting corporate challenge regardless of industry diversity. Effectively utilizing resources drives high profitability, pressuring companies to secure returns funding further opportunities and reinforcing financial strength and durability (Khanqah & Ahmadnia, 2014). Fierce competition mandates profits enabling smart investments for enduring growth. The dilemma is choosing avenues aligning with capital limitations to avoid borrowing that may detrimentally leverage ratios (Suwaidan et al., 2015). Consequently, this study thoroughly investigates how profitability affects investment options and sustainable profits for Amman Stock Exchange listed industrial corporations.

Therefore, this analysis addresses:

1. How industrial profitability impacts investment opportunities?
2. How investment opportunities affect industrial profit sustainability?
3. How does industrial profitability impacts profit sustainability?

The results provide stakeholders guidance on capital allocation and growth planning for fortifying finances over the long term.

2. Literature review

2.1 Profitability and Its Indicators Measurement

Organizations strive to secure their longevity by attaining a market share that ensures operational efficiency and effectiveness. A pivotal objective in this pursuit is profitability, a cornerstone that companies diligently seek to enhance their financial standing, foster customer trust, bolster competitive prowess, and attract potential investors (Alshehadeh, 2021). The overarching aim is to augment profits by optimizing positive cash flows while minimizing costs (Rahaman et al., 2018). Profitability, a primary goal for profit-centric entities, is imperative for their survival and continued success, serving as a crucial gauge of management efficiency in resource utilization. This metric delineates the correlation between earned profits and the investments that contributed to their generation, measured through profit-to-sales or profit-to-investment ratios (Salman et al., 2017). Beyond internal assessments, profitability holds significant relevance for shareholders, acting as a yardstick for a company's income-generating capacity and a critical factor for creditors in evaluating repayment capabilities (Oudat et al., 2019).

In essence, profitability encapsulates the net outcome of diverse policies and decisions that underscore the efficacy of a company's operational activities (Ross et al., 2016). As per Syeda (2021), it is an indicator of financial health and the adept management of business facilities. Viewing profitability as a measure of operational efficiency, it signifies the optimal use of available resources (Alshehadeh, 2021). The ability to generate revenue from investments and resources, surpassing incurred expenses, defines profitability, and higher profitability elicits greater satisfaction from investors, creditors, and management (Shahzad et al., 2015).

In a broader context, profitability signifies a company's prowess in achieving not just immediate profit but also in generating current and future cash flows. It embodies the nexus between profits and sales or profits and the investments underpinning

those profits, ultimately determining a company's efficiency and its capacity for sustained operation (Akgun et al., 2018) (Ross et al., 2016). Various indicators gauge how efficiently companies manage their funds, with notable examples being Return on Assets (ROA) (Al Omari et al., 2017) (Gibson, 2016). ROA, considered a comprehensive measure of profitability, is computed using the formula:

$$ROA = \text{Net Income After Taxes} + [\text{Interest Expense} \times (1 - \text{TaxRate})] / \text{Average Total Assets}$$

This indicator, the Return on Assets (ROA), serves as a yardstick for the company's prowess in realizing profits from invested assets and the efficiency in utilizing available resources. Essentially, it gauges the capacity of assets to generate income, irrespective of the funding sources—be it from the company's owners or external sources. A heightened level of this indicator signifies an optimal utilization of available resources, implying that the company endeavors to yield comparatively higher profits in relation to its assets. This emphasis on achieving greater profitability per asset showcases a commitment to effective capital management (Akgun et al., 2018).

2.2 Investment Opportunities and Their Indicators

Financial management seeks to assess financing sources and investment avenues, employing diverse criteria that may vary among companies. The objective is to make optimal choices for a company's available investments. This involves scrutinizing both the quantity and quality of financial sources and the realms of expenditure, encompassing both current and fixed assets. As investment opportunities for a company expand, the quest for additional financing sources intensifies, underscoring the pivotal role of financing sources in influencing the company's profitability (Hossain et al., 2005). The influence of investment opportunities on companies is multifaceted, impacting the perceptions of company managers, owners, investors, and creditors. Capital projects constitute integral components, and decisions to accept or reject projects hinge on the evaluations conducted by company managers (Akhtaruddin & Hossian, 2008).

Investment opportunities stand as linchpins for the sustained operation of companies, with corporate growth reliant on the existence of opportunities capable of yielding future profits. Companies strategize to achieve their goals through comprehensive plans, policies, and programs that delineate resource management and the exploitation of investment opportunities (Djalil et al., 2017). The fundamental concept behind these opportunities is to initiate new capital expenditures, encompassing initiatives like expanding production capacity (Jebril et al., 2023), adding production lines, acquiring new machinery, replacing existing assets, or amplifying the production of current products (Al-Afeef, 2023). The overarching aim of these activities is to maximize value for shareholders and stakeholders, and decisions impacting the company's value are intricately linked to the available investment opportunities. Positive indications regarding the company's future growth can elevate stock prices, augmenting the company's standing in capital markets (Al-Chahadah et al., 2020).

On the flip side, heightened investment opportunities often necessitate increased financing, particularly if the company is grappling with liquidity constraints. This may prompt the company to resort to borrowing to fund these opportunities, potentially leading to shifts in the capital structure—a topic that has long been a subject of debate regarding the existence of an optimal financial structure (Yuliani et al., 2012).

The foundation of investment opportunities rests on two key points. Firstly, they denote the investment decisions made by a company to foster positive growth, thereby representing the potential for expansion. Secondly, investment opportunities signify a company's capacity to discern the type of investment to execute (Hidayah, 2015). These opportunities also mirror the value of a company through its fixed assets, with this value increasing with a rise in investment opportunities and decreasing with a decline in the fixed assets to total assets ratio. Additionally, they reflect the company's prospective investment options, characterized by a positive net present value (Anggi et al., 2019). In this context, common metrics used to measure investment opportunities, as identified by Adam & Goyal (2008) and Aivazian & Qiu (2005), include:

1. **Market-to-Book Assets Ratio (MTBA):** This ratio substitutes the book value of assets for existing fixed assets and the market value of assets for investment opportunities. An increase in this ratio indicates abundant investment opportunities related to existing fixed assets.
2. **Market-to-Book Equity Ratio (MTBE):** Reflecting a combination of cash flows from future investment opportunities and fixed assets, this ratio compares the market value of equity to the book value of equity. An increase in this ratio suggests favorable investment opportunities.
3. **Earnings Price Ratio (EP):** This ratio highlights that a substantial portion of stock value is linked to fixed assets relevant to investment opportunities. A rise in this ratio signals promising investment opportunities.
4. **Growth of Fixed Assets (GFA):** Representing the value of investment in fixed assets for a fiscal year, an increase in this ratio indicates commendable profitability indicators, manifesting through an expansion in the volume of fixed asset investments.
5. **Cash Flow to Fixed Assets Ratio (CFA):** A surge in this ratio indicates that a significant portion of the value of fixed assets is attributable to operating cash flows related to investment opportunities. However, a decrease in this ratio does not necessarily imply favorable investment opportunities.

2.3 Sustainability of profits

The understanding and interpretation of profit quality hinges on the perspective of financial statement users and their objectives. Standard setters and auditors contend that profit quality is attained when it aligns with recognized accounting principles and standards. Conversely, creditors assess profit quality in terms of its sustainability and the capacity to translate it into adequate cash flows for fulfilling the company's obligations (Dechow & Schrand, 2004). This multifaceted concept of profit quality plays a pivotal role in financial analysis, offering financial analyst's positive insights into three key dimensions: current operational performance, future operational performance, and overall company value (Richardson, 2003).

Accounting profit quality is essentially profits characterized by attributes desired by financial report users, aiding in achieving broader financial reporting goals and specific objectives related to accounting profit reporting (Dechow et al., 2010). The sustainability of profits is a crucial aspect, with permanent profits considered high-quality. This notion of profit quality holds immense significance for all stakeholders in the banking sector, influencing crucial investment decisions (Sadaa et al., 2020).

The announcement of profit sustainability serves as a common metric for gauging the quality of profits, where consistently declared profits are deemed more sustainable and of higher quality. In contrast, less sustainable profits exhibit temporality and lower quality. Sustainability, in this context, signifies the degree to which current profits will persist in the future and endure over time (Al-Zaqeba, 2022).

A decline in accounting profit quality not only results in a lack of information alignment among interested parties but also escalates the risks of adverse selection for liquidity providers, subsequently increasing liquidity costs. This, in turn, contributes to heightened capital costs (Alqudah et al., 2023). Profit quality serves as an indicator of dividend distributions, showcasing a relationship between profit quality and dividend payouts. Higher profit quality enhances the likelihood of companies paying dividends, with the amount of these distributions also increasing alongside higher profit quality (Nurbach et al., 2019).

A study by Dechow et al. (2010) delved into the reasons for variations in profit quality measures and their outcomes. It categorized profit quality indicators into three main categories: profit attributes, investor response to profits, and external indicators of profit manipulation. Despite the study's inability to arrive at a definitive conclusion on profit quality measures and indicators, it emphasized that the quality depends on the context used for judgment. The study also underscored that profit quality is a function in key performance indicators of the company.

High-quality profits are synonymous with sustainability, reflecting stability levels and consistent growth. The sustainability of profits, whether through constant growth or stable increments, becomes a key indicator of their quality. Such profits are perceived as stable and not a result of profit management, rendering them preferable for investment decisions by analysts and investors. Analysts regard stable profits as effective predictive tools for gauging future company performance (Al-Shahadah et al., 2023).

Numerous studies, including those by Nurbach et al. (2019), Ruihao (2012), Dechow & Schrand (2010), and Schipper & Vincent (2003), have employed profit continuity and future repetition as indicators of its quality. Continuity underscores the link between current and future profits and given that profits encompass both cash flows and receivables, profit quality leans more towards the continuity of cash flows than receivables. Various methodologies have been applied in previous studies to measure profit quality, with one notable approach being the assessment of stability and sustainability of profits. Through a comprehensive review of past definitions, it becomes evident that the confirmation of these concepts hinges on associating quality with the continuity and stability of profits. Models developed in this domain to gauge profit quality include those connecting current profits with future ones, or more precisely, linking preceding profits with subsequent ones (Schipper and Vincent, 2003).

$$E_t = \alpha + \beta E_{t-1} + \varepsilon_t$$

where E_t is the current profits of the company. E_{t-1} is the past profits of the company. The determination of profit quality levels can be derived from the regression equation, wherein the coefficient (β) plays a crucial role. A noteworthy observation is that as the coefficient value ascends and approaches 1, it signifies an augmentation in the relationship between current and future profits, thereby indicating an enhancement in profit quality. In accounting, profit sustainability is characterized by the extent of the linkage between current accounting profits and future profits. Profits deemed permanent are considered of high quality. However, the utility of profit quality lies in its ability to accurately depict the outcomes of a company's activities. To quantify this, the simple linear regression analysis method was employed, a technique previously utilized in research by Francis et al. (2004). The estimation of the regression coefficient (β) is derived through the following model:

$$X_{it} / A_{it-1} = \beta_{0,i} + \beta_{1,i} X_{it-1} + \varepsilon_{it}$$

where,

X_{it} = is the earnings per share for period t . A_{it-1} = is the total assets of the company for year $t-1$.

X_{it-1} is the earnings per share for period $t-1$. ε_{it} represents the random error of the model.

The significance of the estimated coefficient β_1 lies in its proximity to 1, indicating a high level of earnings momentum. When the coefficient is close to zero, it implies that earnings momentum is highly temporary, lacking a stability element. In scenarios where the sign is negative, it suggests a deficiency in profit quality. The regression equation, essential for these determinations, was computed using the SPSS program for each company within the research community.

3. Methods

3.1 Study Population

The study encompasses all industrial companies publicly listed on the Amman Stock Exchange, totaling 53 entities, constituting the entirety of the selected sample. Data Collection Methodology: Employing a descriptive analytical approach in alignment with the study's nature, this methodology involves the collection, description, and analysis of data derived from the financial statements of publicly listed industrial companies on the Amman Stock Exchange during the period spanning 2018 to 2022. The data, sourced from the Amman Stock Exchange website, underwent subsequent analysis using statistical methods suitable for hypothesis testing and drawing conclusive insights.

3.2 Study Variables and Measurement

1. **Independent Variable:** Return on Assets (ROA): Serving as a comprehensive metric of profitability, ROA is calculated using the equation:

$$\text{Return on Assets} = \frac{\text{Net Income After Taxes} + [\text{Interest Expense} \times (1 - \text{Tax Rate})]}{\text{Average Total Assets}}$$

2. **Mediating Variables:** Investment Opportunities (IE): (Eghbalnia et al., 2014; Khanqah & Ahmadnia, 2014; Adam & Goyal, 2008)
 - **Market-to-Book Ratio (MTBA).**
 - **Market-to-Book Ratio of Ownership Rights (MTBE).**
 - **Earnings per Share to Market Price per Share (EP).**
 - **Growth Rate of Fixed Assets (GFA).**
 - **Operating Cash Flows to Fixed Assets (CFA).**
3. **Dependent Variable:** Profit Continuity (CP): This variable is gauged by assessing the stability and continuity of profits, drawing upon insights from Richardson (2003), Francis et al. (2004), and Schipper and Vincent (2003).

3.3 *Study Models:* The mathematical models designed to measure the relationships among the independent, mediating, and dependent variables are structured as follows:

Model 1: Assessing the Impact of Return on Assets on Investment Opportunity Indicators:

This initial model scrutinizes the influence of the independent variable, Return on Assets, on investment opportunity indicators within industrial companies listed on the Amman Stock Exchange. The model evaluates the interplay between ROA and various investment opportunity indicators, providing valuable insights into their relationships, as follows:

$$IE_{i,t} = \alpha + \beta_1 ROA_{i,t} + \mu_{i,t} \quad (1)$$

Moreover, given that the dependent variable, Investment Opportunity Indicators (IE), is subdivided into five distinct components, each representing a specific investment opportunity indicator, a sub-model has been formulated for each of these subsidiary variables. The structure of these sub-models is delineated as follows:

$$MTBA_{i,t} = \alpha + \beta_1 ROA_{i,t} + \mu_{i,t} \quad (2)$$

$$MTBE_{i,t} = \alpha + \beta_1 ROA_{i,t} + \mu_{i,t} \quad (3)$$

$$EP_{i,t} = \alpha + \beta_1 ROA_{i,t} + \mu_{i,t} \quad (4)$$

$$GFA_{i,t} = \alpha + \beta_1 ROA_{i,t} + \mu_{i,t} \quad (5)$$

$$CFA_{i,t} = \alpha + \beta_1 ROA_{i,t} + \mu_{i,t} \quad (6)$$

Model 2: Assessing the Impact of Investment Opportunity Indicators on Profit Continuity in Jordanian Commercial Banks

Following the assessment of the influence of the Return on Assets (ROA) indicator on the dependent variable "Investment Opportunity Indicators", the subsequent phase entails gauging the impact of the mediating variable "Investment Opportunity Indicators" on the dependent variable, profit continuity, within industrial companies listed on the Amman Stock Exchange. This examination is conducted through the application of the following model:

$$CP_{i,t} = \alpha + \beta_1 MTBA_{i,t} + \beta_2 MTBE_{i,t} + \beta_3 EP_{i,t} + \beta_4 GFA_{i,t} + \beta_5 CFA_{i,t} + \mu_{i,t} \quad (7)$$

Model 3: Assessing the Impact of Return on Assets Indicator on Profit Continuity in Jordanian Commercial Banks

Having evaluated the impact of investment opportunity indicators on profit continuity in industrial companies listed on the Amman Stock Exchange, the subsequent phase entails measuring the influence of the independent variable "Return on Assets" on the dependent variable, profit continuity, within the same cohort of companies. This analysis is executed through the application of the following model:

$$CP_{i,t} = \alpha + \beta_1 ROA_{i,t} + \mu_{i,t} \quad (8)$$

3.4 Study Hypotheses In this study, we examine two main categories of hypotheses, each contributing to a comprehensive understanding of factors influencing investment opportunities indicators and their subsequent impact on the profitability continuity of industrial companies listed on the Amman Stock Exchange.

The first set of hypotheses addresses the factors influencing investment opportunities indicators in industrial companies. *Our initial hypothesis (H01) questions the existence of a significant impact, at a significant level ($\alpha \leq 0.05$), of return on assets on the investment opportunities indicators.* To develop deeper into this, we formulate five sub-hypotheses:

- **H01-1:** *No significant impact exists, at a significant level ($\alpha \leq 0.05$), of return on assets on the market value of assets to the book value of assets in industrial companies listed on the Amman Stock Exchange.*
- **H01-2:** *No significant impact exists, at a significant level ($\alpha \leq 0.05$), of return on assets on the market value of ownership rights to the book value of ownership rights in industrial companies listed on the Amman Stock Exchange.*
- **H01-3:** *No significant impact exists, at a significant level ($\alpha \leq 0.05$), of return on assets on the share of profit to market share price in industrial companies listed on the Amman Stock Exchange.*
- **H01-4:** *No significant impact exists, at a significant level ($\alpha \leq 0.05$), of return on assets on the fixed assets growth rate in industrial companies listed on the Amman Stock Exchange.*
- **H01-5:** *No significant impact exists, at a significant level ($\alpha \leq 0.05$), of return on assets on operating cash flows to fixed assets in industrial companies listed on the Amman Stock Exchange.*

Moving on, our second hypothesis (*H02*) *explores the potential lack of a significant impact, at a significance level ($\alpha \leq 0.05$), of investment opportunities indicators on the profitability continuity of industrial companies listed on the Amman Stock Exchange.*

Lastly, our third hypothesis (**H03**) *questions whether there is a significant impact, at a significant level ($\alpha \leq 0.05$), of return on assets in industrial companies listed on the Amman Stock Exchange on their profitability continuity.*

Through these hypotheses, we aim to contribute to the nuanced understanding of the intricate relationships between investment opportunities indicators, return on assets, and the sustained profitability of industrial companies on the Amman Stock Exchange. The results of this study will be vital for stakeholders, investors, and policymakers seeking to make informed decisions in the dynamic landscape of financial markets.

4. Hypotheses Testing

The research hypotheses were scrutinized employing both simple and multiple linear regression analyses. The primary hypothesis underwent examination through multiple linear regression, where the independent variable, return on assets, was evaluated against the dependent variable, along with its five sub-dimensions. These sub-dimensions encompass market value of assets to book value of assets, market value of ownership rights to book value of ownership rights, share of profit to market share price, fixed assets growth rate, and operating cash flows to fixed assets. Following this, a subsequent analysis was conducted using simple linear regression tests for each sub-dimension of the dependent variable against the independent variable.

The null hypothesis (H0) posited that there is no statistically significant impact, at a predetermined significance level ($\alpha \leq 0.05$), of return on assets within industrial companies listed on the Amman Stock Exchange on their indicators of investment opportunities. To put it differently, the study aimed to ascertain whether variations in return on assets have a meaningful effect on the investment indicators of companies within the industrial sector of the Amman Stock Exchange.

Table 1

Illustrates the Multiple Linear Regression Test for the First Primary Hypothesis of the Study

Independent variable	Correlation coefficient (R)	Coefficient of determination (R ²)	F-value	P-value	Dependent variable Investment opportunities	Beta	Standard error	T -value	P-value
ROA	0.582	0.477	43.423	0.000	Constant	0.537	0.264	3.041	0.021
					MTBA	0.310	0.229	1.876	0.043
					MTBE	0.049	0.124	0.509	0.735
					EP	0.275	0.127	3.761	0.028
					GFA	0.314	0.245	2.140	0.013
					CFA	0.045	0.346	1.256	0.017

Table 1 presents the results of the multiple linear regression analysis, examining the primary hypothesis of the study, which aimed to assess the influence of return on assets on investment opportunity indicators and their respective dimensions. These dimensions include market value of assets to book value of assets, market value of ownership rights to book value of ownership rights, share of profit to market share price, fixed assets growth rate, and operating cash flows to fixed assets. The correlation coefficient (R) in this analysis yielded a value of 0.582, signifying a robust impact of the independent variable on the collective dependent variables. Furthermore, the coefficient of determination (R^2) stood at 0.477, indicating that the independent variable explains 47.7% of the variance in the dependent variables collectively. This underscores the explanatory power of return on assets in elucidating changes in the investment opportunity indicators. The calculated F-value of 43.423, coupled with a p-value of 0.000, attests to the statistical significance of the regression model. Consequently, the null hypothesis is rejected, and the alternative hypothesis asserting a significant impact of return on assets in industrial companies listed on the Amman Stock Exchange on their investment opportunity indicators, at a significance level ($\alpha \leq 0.05$), is accepted. To explore the sub-hypotheses of the study, a subsequent analysis employed simple linear regression tests for each element of the dependent variable. Table 2 provides a detailed presentation of these tests.

Table 2
Illustrates the Simple Linear Regression Test for the Five Sub-Hypotheses of the Study

Dependent variable	Independent variable	Correlation coefficients (R)	Determination coefficients R^2	Beta	Standard error	T-value	P-value	Judging the hypothesis
MTBA		0.678	0.501	0.651	0.069	7.312	0.000	Accept the alternative hypothesis
MTBE		0.541	0.476	0.613	0.052	9.714	0.000	Accept the alternative hypothesis
EP	ROA	0.354	0.219	0.442	0.093	11.521	0.000	Accept the alternative hypothesis
GFA		0.425	0.323	0.471	0.054	8.547	0.000	Accept the alternative hypothesis
CFA		0.332	0.265	0.721	0.046	10.234	0.000	Accept the alternative hypothesis

Table 2 presents the assessment of the five sub-hypotheses in the study, employing simple linear regression. The results unveiled in Table 2 shed light on the correlation between variables, specifically focusing on the market value of assets to book value of assets and its relationship with return on assets.

For the market value of assets to book value of assets, the correlation coefficient (0.678) indicates a substantial relationship between this dimension and return on assets. The coefficient of determination (0.501) underscores that return on assets contributes 50.1% of the variability in the market value of assets to book value of assets. The beta coefficient (0.651) signifies a positive impact, suggesting that an increase in return on assets corresponds to an increase in the market value of assets to book value of assets. The calculated t-value (7.312) surpasses the tabulated value (1.96), and the p-value (0.000) attests to the statistical significance at a confidence level of 95%. Consequently, the null hypothesis is rejected, affirming the alternative hypothesis that posits a significant impact of return on assets on the market value of assets to book value of assets in industrial companies listed on the Amman Stock Exchange.

Similarly, exploring the impact of return on assets on the market value of ownership rights to book value of ownership rights, the results from Table 2 indicate a correlation coefficient of 0.541. The determination coefficient of 0.476 implies that return on assets explains 47.6% of the variability in the market value of ownership rights to book value of ownership rights. The beta coefficient (0.613) suggests a positive influence of return on assets on this dimension. With a calculated t-value of 9.714 (exceeding the tabulated value of 1.96) and a p-value of 0.000, the statistical significance is evident at a confidence level of 95%. Consequently, the null hypothesis is rejected, supporting the alternative hypothesis that asserts a significant impact of return on assets on the market value of ownership rights to book value of ownership rights in industrial companies listed on the Amman Stock Exchange.

Turning attention to the third sub-hypothesis, which assesses the impact of return on assets on the share of profit to market share price, the correlation coefficient of 0.354 implies a moderate relationship between these variables. The determination coefficient of 0.219 signifies that return on assets accounts for 21.9% of the variability in the share of profit to market share price. The beta coefficient (0.442) indicates a positive impact of return on assets on this dimension. The calculated t-value of 11.521 (exceeding the tabulated value of 1.96) and a p-value of 0.000 affirm the statistical significance at a confidence level of 95%. Consequently, the null hypothesis is rejected, affirming the alternative hypothesis that postulates a significant impact of return on assets on the share of profit to market share price in industrial companies listed on the Amman Stock Exchange.

Examining Table 2, we delve into the outcomes of testing the fourth sub-hypothesis of our study through a simple linear regression. This sub-hypothesis scrutinizes the influence of return on assets on the fixed assets growth rate. The correlation coefficient between the variables stood at 0.425, implying a moderate correlation. The determination coefficient, at 0.323, suggests that return on assets contributes to 32.3% of the variability in the fixed assets growth rate. The beta coefficient of 0.471 indicates a positive impact, revealing that an increase in return on assets corresponds to an increase in the fixed assets growth rate. The calculated t-value of 8.547 exceeds the tabulated value of 1.96, with a p-value of 0.000, demonstrating statistical significance at a confidence level of 95%. Consequently, the null hypothesis is rejected, affirming the alternative hypothesis that posits a significant impact of return on assets on the fixed assets growth rate in industrial companies listed on the Amman Stock Exchange.

Turning our attention to the fifth sub-hypothesis, which evaluates the effect of return on assets on operating cash flows to fixed assets, Table 2 presents the findings. The correlation coefficient between the variables is 0.332, indicating a moderate correlation. The determination coefficient, at 0.265, signifies that 26.5% of the variance in operating cash flows to fixed assets can be attributed to return on assets. The beta coefficient of 0.721 points to a positive impact, implying that higher return on assets correlates with increased operating cash flows to fixed assets. The calculated t-value of 10.234 exceeds the tabulated value of 1.96, with a p-value of 0.000, indicating statistical significance at a confidence level of 95%. Hence, the null hypothesis is rejected, supporting the alternative hypothesis asserting a significant impact of return on assets on operating cash flows to fixed assets in industrial companies listed on the Amman Stock Exchange.

To explore the second main hypothesis of our study, positing no significant impact, at a confidence level of 95%, of investment opportunity indicators for industrial companies listed on the Amman Stock Exchange on the continuity of their profits, we conducted a multiple linear regression test. The impact of all intermediate variables on the dependent variable is illustrated in Table 3. This analysis aims to provide insights into whether the identified investment opportunity indicators significantly influence the continuity of profits for industrial companies on the Amman Stock Exchange.

Table 3

Illustrates the multiple linear regression test for the second main hypothesis of the study.

Dependent variable	Correlation coefficient (R)	Coefficient of determination (R ²)	F-value	P-value	Intermediate variables	Beta	Standard error	T-value	P-value
CP	0.427	0.316	45.153	0.000	Constraint	0.335	0.272	3.071	0.003
					MTBA	0.270	0.127	1.725	0.002
					MTBE	0.089	0.174	0.352	0.035
					EP	0.251	0.156	2.381	0.029
					GFA	0.359	0.186	2.458	0.001
					CFA	0.405	0.273	4.256	0.000

Table 3 presents the findings from the multiple linear regression test, a critical component for evaluating the second main hypothesis of our study. This hypothesis aims to unravel the influence of investment opportunity indicators, encompassing dimensions such as market value of assets to book value of assets, market value of property rights to book value of property rights, share of profit to market share price, fixed asset growth rate, and operating cash flows to fixed assets, on the continuity of profits in industrial companies listed on the Amman Stock Exchange. Examining the correlation coefficient (R), its value of 0.427 suggests a robust impact of the combined intermediate variables on the dependent variable, indicating a significant association. The coefficient of determination (R²) at 0.316 underscores the explanatory power of these combined intermediate variables, explaining 31.6% of the variability in the dependent variable. In other words, nearly one-third of the variation in profit continuity can be attributed to the identified investment opportunity indicators.

The calculated F-value of 45.153, coupled with a probability value of 0.000, signifies the statistical significance of the regression model. This implies that the regression equation is not equal to zero, and at least one variable within the model is statistically significant. Consequently, the null hypothesis is rejected, supporting the alternative hypothesis that posits a statistically significant impact, at the 95% confidence level of investment opportunity indicators for industrial companies listed on the Amman Stock Exchange on their profit continuity. To delve into the third main hypothesis of our study, asserting no statistically significant impact, at the 95% confidence level of return on assets in industrial companies listed on the Amman Stock Exchange on their profit continuity, we conducted a simple linear regression test. This analysis specifically explores the relationship between the independent variable (return on assets) and the dependent variable (profit continuity), as elucidated in Table 4.

Table 4

Displays the simple linear regression test for the third main hypothesis.

Dependent variable	Correlation coefficients (R)	Determination coefficients R ²	Independent variable	Beta	Standard error	T-value	P-value	Judging the hypothesis
CP	0.513	0.410	ROA	0.672	0.085	7.432	0.000	Accept the alternative hypothesis

Table 4 illustrates the examination of the third main hypothesis through a simple linear regression analysis. This hypothesis investigates the potential impact, at the 95% confidence level of return on assets in industrial companies listed on the Amman Stock Exchange, on the sustainability of their profits.

The results within Table 4 disclose a correlation coefficient of 0.513, denoting a moderate positive relationship between return on assets and the sustainability of profits. The determination coefficient (0.410 R^2) further reveals that 41.0% of the variation in the dependent variable can be attributed to variations in the independent variable, return on assets. The beta regression coefficient value of 0.672 underscores a positive impact, indicating that an increase in return on assets correlates with an increase in the sustainability of profits for industrial companies on the Amman Stock Exchange. To scrutinize the significance of this impact, the calculated t-value of 7.432 surpasses the tabulated value of 1.96, with a p-value of 0.000, indicating statistical significance at the 0.05 level. Consequently, the null hypothesis is rejected, and the alternative hypothesis is accepted: there is a statistically significant impact, at the 95% confidence level of return on assets in industrial companies listed on the Amman Stock Exchange, on the continuity of their profits. This implies that variations in return on assets are associated with notable changes in the sustainability of profits among the industrial companies in the Amman Stock Exchange.

5. Discussion

The study holds significance in exploring the nexus between profitability, investment opportunities, and the sustainability of profits among companies listed on the Amman Stock Exchange. This exploration is achieved by examining a spectrum of variables that encapsulate the financial and economic characteristics of the studied companies. Through rigorous analyses and the evaluation of pertinent indicators derived from the companies' data, the study aims to offer valuable insights for decision-makers across different organizational levels within the study community. The envisaged benefits of this research lie in the potential recommendations and suggestions it can furnish, ultimately streamlining financial and managerial decisions related to profitability and investment opportunities. This, in turn, is anticipated to enhance financial efficiency by aiding in the selection of optimal strategies for profit augmentation and sustainability, thereby contributing to the overall improvement of financial and managerial performance within these companies.

The discourse on the interplay between components of profitability, investment opportunities, and their collective impact on profit sustainability has garnered considerable attention in existing literature. Upon reviewing relevant studies, notable findings from prior research emerge. For instance, Murniati's (2019) investigation underscored a positive and significant impact of investment decisions on company profitability and value, highlighting the overarching objective of maximizing shareholder wealth. In a contrasting vein, Mahdi et al. (2022) delved into the influence of investment opportunities on company value, with a specific focus on the role of institutional governance and board independence in firms listed on the Tehran Stock Exchange. Their findings indicated a discernible impact of investment opportunities on company value, mitigated by effective institutional governance and independent boards. Another exploration by Nguyen and Nguyen (2020) centered on the impact of capital structure on the performance of state-owned and non-governmental companies listed on the Vietnamese stock market. Their empirical results revealed a statistically significant negative impact of capital structure on company performance, with a more pronounced effect observed in state-owned entities. These insights furnish valuable considerations for managers seeking to optimize company performance through strategic capital structure decisions.

Building on this discourse, Suwaidan et al. (2015) conducted a study specifically targeting the impact of investment opportunities on the capital structure of industrial companies listed on the Amman Stock Exchange. Their results indicated a statistically significant negative impact of investment opportunities, measured by the proportion of cash flows generated from fixed assets, on the debt ratio. Notably, Jordanian industrial companies were found to favor equity financing over debt for new investment opportunities, considering it a more cost-effective alternative. The study also highlighted a preference for minimal debt usage due to the associated risks, thereby reducing the likelihood of bankruptcy.

6. Conclusion

In conclusion, this study contributes to the existing body of knowledge by elucidating the intricate relationship between profitability, investment opportunities, and the sustainability of profits in companies listed on the Amman Stock Exchange. The findings not only align with prior research but also extend our understanding of how these factors interconnect. The practical implications of this research are manifold, offering valuable insights for decision-makers and managers seeking to optimize financial and managerial performance. As organizations navigate the complexities of profitability and investment decisions, the study provides a foundation for informed strategies, ultimately fostering improved financial efficiency and long-term sustainability.

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