Journal of Infrastructure, Policy and Development 2024, 8(7), 4788.
https://doi.org/10.24294/jipd.v8i7.4788

Article

Marketing investment and its impact on profitability and sustainable growth

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CITATION

Qirem IAE, Alshehadeh AR, Elrefae GA, Eletter S. (2024). Marketing investment and its impact on profitability and sustainable growth. Journal of Infrastructure, Policy and Development. 8(7): 4788. https://doi.org/10.24294/jipd.v8i7.4788

ARTICLE INFO

Received: 21 February 2024
Accepted: 25 March 2024
Available online: 1 August 2024

Abstract: This study aims to elucidate the impact of marketing investment dimensions (MTS, MTOE, ROMI) on profitability indicators (ROA, ROE, GPM, OPM) and sustainable growth indicators (SGR, ARG) for service companies. The study population consisted of 135 service companies listed on the Amman Stock Exchange. A purposive sample of 55 companies was selected from this population. Financial reports and statements from 2018–2022 for these companies were analyzed to achieve the study objectives, employing appropriate statistical methods like multiple regression to test hypotheses. Previous literature shows conflicting results regarding the relationship between marketing investment dimensions and profitability/sustainable growth. Some studies found positive impacts, while others did not. This study contributes to this debate by providing statistical evidence. The results show that higher MTS, MTOE, and ROMI have a positive impact on SGR, OPM and ROA but a negative impact on GPM, ARG, and ROE. This underscores that marketing investments should be viewed in conjunction with overall operating expenses. Companies that control other expenses and increase the marketing investment proportion of total operating expenses may achieve better financial performance. Marketing investment metrics can serve as useful diagnostics and measures of effectiveness for improving marketing profitability, financial performance, and growth. In summary, this study statistically demonstrates the nuanced impacts of marketing investments on service company profitability and sustainable growth indicators. The results emphasize analyzing marketing spends in context of broader expenses and overall company financial health.

Keywords: marketing investment; profitability; sustainable growth; service sector companies

1. Introduction

The service sector is considered the cornerstone of the Jordanian economy and a fundamental driver of economic growth. Prior to the COVID-19 pandemic crisis, the sector's contribution to the GDP amounted to 64.9%, and during the crisis, it reached 65.5%. In 2023, Jordan recorded an acceleration in its economic growth after recovering from the impact of the coronavirus pandemic shock, demonstrating resilience in the face of global and local challenges. The overall growth rate of real GDP reached 2.8%, driven by strong growth in the service sectors (transportation and communications, finance and insurance, and wholesale and retail trade activities). The service sector in Jordan represents approximately two-thirds of productivity compared to the trade and industry sectors. The Jordanian economy recorded real GDP growth of 2.4% in 2022 and 2.6% at constant prices in 2023. This growth was supported by a strong contribution from the service sectors, accounting for nearly 66% of the national economy, with a value of 21 billion Jordanian dinars. The trading volume of service sector companies on the Amman Stock Exchange during the third month of 2024 amounted to 447,152,864 million Jordanian dinars, ranking third and accounting for

31% of the trading volume on the Amman Stock Exchange (Central Bank of Jordan, 2024).

The investment in marketing activities is a crucial element to ensure the continuity, growth, and development of companies in the competitive business environment they operate in. The process of investing plays a significant role in enhancing the capabilities of companies to develop products and services that meet market requirements. Presenting these products and services through innovative marketing methods that align with the needs of consumers and clients reflects positively on enhancing the competitive advantage and financial performance of the company (Musaab et al., 2021). Companies today aspire to achieve success, excellence, and distinction in all their operations and activities. They strive to attain efficiency and effectiveness in their performance, particularly with acceptable rates of profitability indicators. Consequently, they aim to build a strong and distinctive strategic position that ensures growth and sustainability in the ever-changing environment (Bradbury and Neal, 2006). When companies seek excellence in the market, they leverage their available financial resources and skills, which collectively form the capabilities and investments in marketing activities. This is done to exploit the accumulated knowledge about meeting the needs of consumers and clients. The ultimate goal is to enhance the market share of the company and achieve sustainable growth in its operations (Garbiah and Levent, 2021).

The primary objective of any economic activity is to achieve profitability and maximize shareholder wealth. Companies, in pursuit of profitability, efficiently and effectively utilize their available resources distributed across all their activities (Al Omari et al., 2017). Profitability serves as a tool to measure the efficiency of the company's investment, operational, and financial management policies, indicating its ability to generate positive current and future cash flows and appropriate returns compared to the available resources (St-Hilaire and Boisselier, 2018). Hence, this study aims to demonstrate the dimensions of marketing investment and its impact on profitability and sustainable growth in service companies listed on the Amman Stock Exchange.

The problem addressed in this study arises from the intense competition in today's business world, where companies need to introduce new and innovative products that align with the preferences and needs of customers. Companies operate in a highly complex and competitive environment, leading to uncertainty in results and risks. The current success criterion for companies revolves around maintaining and enhancing market share, achieving sustainable growth, and meeting standardized profitability indicators (Kalinin et al., 2019).

Numerous previous studies have shown that positive marketing performance and investments have an impact on revenue growth rates and various performance indicators of companies. These indicators range from product market performance, such as sales revenue, market share, sales growth, and customer satisfaction, to financial performance outcomes, including cash flow, profitability, and return on investment (Garbiah and Levent, 2021). Literature also suggests that companies with strong marketing investment capabilities have a stronger ability to create value for customers and stakeholders interested in the company's economics, thereby maintaining a competitive advantage and achieving financial performance that ensures

continuity in business (Hughes et al., 2018).

Upon reviewing and examining the disclosures in the financial statements of the companies representing the study population, the researchers found that the volume of marketing investment in most of the companies under study did not meet the assumed level that it should represent in terms of the value of operating expenses in this vital sector of the Jordanian economy. It was revealed that the volume of marketing expenses ranged between 8% to 15% of the total operating expenses and between 3% to 7% of the volume of investment expenditures of the companies during the study period. These indicators do not reflect the growth volume in the Jordanian service sector. The growth rate for this sector was 3.2% in 2018, and this sector ranked second in terms of economic contribution to the GDP at current prices, with a percentage of 22.4%. In contrast, the growth rate for this sector in 2023 was 8.9%, ranking third in terms of economic contribution to the GDP at current prices, with a percentage of approximately 31.2% (Central Bank of Jordan, 2024). The percentage of establishments in the service sector out of the total number of establishments increased from 85.5% before the COVID-19 crisis to 97.7% during the crisis and 96.7% after the crisis. This significant increase in the percentage of establishments reflects a noticeable growth in the service sector and an increase in commercial activities and services provided. These indicators demonstrate the sustainability and economic strength of the service sector, reflecting sustainable development and success in achieving economic growth.

Given the importance of marketing investments and their impact on various economic and financial variables in companies, researchers have increasingly focused on emphasizing the importance of marketing investment and its benefits. This is within the framework of companies utilizing all available resources to achieve their objectives, particularly in maintaining market share and achieving acceptable financial performance (Bradbury and Neal, 2006). Literature also indicates that the performance of companies is influenced by the business environment and strategies adopted to create alignment between the external and internal environment of the company. For any company to achieve its goals, it must build strong marketing capabilities and investments to face competition, increase market share, achieve sustainable growth, and ensure good financial performance (Doğan and Mecek, 2015). Companies aiming for sustainability should strive for the availability of marketing investments that positively impact their performance and market efficiency (Musaab et al., 2021).

Companies today face complex variables in their work environment, necessitating a comprehensive review of their investment and marketing performance strategies. Therefore, companies need to develop their methods related to marketing investment capabilities while maintaining acceptable operating expenses to choose and compete in the field they operate in (Mitchell and Howard, 2013). Having a well-established marketing plan serves as a guide for companies to select and endorse the adoption of a marketing investment strategy. This ensures their survival, continuity, and strong positioning compared to competitors. This adaptation is crucial to meet the new requirements of changing competition indicators that align with sustainable growth and high financial performance in economic and financial terms (Kalinin et al., 2019). The problem of the study can be summarized by posing and answering the following key questions:

1) Is there an impact of marketing investments on the profitability indicators of service companies listed on the Amman Stock Exchange?

2) Is there an impact of marketing investments on the sustainable growth indicators of service companies listed on the Amman Stock Exchange?

2. Literature review

2.1. Marketing investment

The primary motive behind marketing investment is to enhance market share, mitigate competition risks, and achieve profits from available capital. Instead of keeping market share limited, financial resources can be used properly through a marketing plan or campaign that elevates the market share of companies' products and services. This enhances their capabilities for growth and sustainability (Doğan and Mecek, 2015). Marketing is considered a fundamental field in the contemporary business world. It encompasses activities designed to acquire and retain customers through promotional activities, relationship-building campaigns, and online content sharing. These activities require companies to allocate financial resources and invest in marketing programs that reflect the implementation of a clear marketing strategy (Alshehadeh et al., 2022b).

Marketing investment is a fundamental part of the sacrifices, operational costs, and capital expenditures that companies undertake to implement the overall marketing strategy (Mitchell and Howard, 2013). Marketing activities require a different business strategy than other departments in the company, playing a pivotal role in the overall company operation. It serves as the interface visible to customers, and if they are not satisfied, they will look elsewhere for their needs (Hughes et al., 2018).

What distinguishes companies today is the rapid evolution of forms and types of similar products or services in terms of shape and content. This makes them live in a volcano of new products and the continuous increase in the forms and quality of these products (Kalinin et al., 2019). One of the main reasons for this evolution in the perception of companies towards marketing activity and investment in it as an activity that adds high value is the intensity of competition in the market and the innovative promotion and advertising methods practiced by companies (Bradbury and Neal, 2006). Therefore, successful companies today are those that develop their products at a faster pace than their competitors, have a greater ability to respond to customer needs, or provide better value and service to customers (Mitchell and Howa, 2013). In all these cases, marketing investment has become one of the most important sources of excellence and a measure of good performance for companies aiming for growth, survival, and continuity in the market (Waller, 2007).

When companies engage in marketing investment, it is essential for them to first define clear objectives and goals for the campaign or marketing plan before implementing it. This will help understand the demographic composition, interests, and behaviors specific to the target market, accurately measuring the success of these campaigns (Konak, 2015). Additionally, the marketing plan or campaign must be market data-driven, as data is a powerful tool that helps in making informed marketing decisions and assists in formulating and analyzing marketing metrics such as customer acquisition cost, customer lifetime value, conversion rates, and identifying channels

and marketing campaigns that achieve the highest return on investment (Musaab et al., 2021).

The results of marketing investment are measured through return indicators that the company achieves from the funds spent on campaigns or marketing plans compared to the revenues generated by these campaigns (Waller, 2007). Multiple indicators measure the return on marketing investment and the effectiveness of the company's marketing strategies and campaigns. These indicators help the company determine the added value resulting from marketing efforts and provide insightful perspectives on the profitability of marketing initiatives (Ashill, 2007). By analyzing return on investment indicators for marketing activities, the company can identify marketing activities that attain the best results and strategically allocate resources to maximize marketing and financial returns (Hughes et al., 2018). Analyzing return on investment indicators for marketing activities is crucial for several reasons (Meffert and Jesko, 2008):

1) It allows companies to objectively evaluate the success of their marketing strategies by comparing the return on investment for adopted campaigns or plans. This enables companies to identify activities that achieve the highest returns and adjust their marketing efforts accordingly, facilitating the economical and efficient allocation of resources and the elimination of strategies that do not yield satisfactory results (Doğan and Mecek, 2015).

2) These indicators provide a future-oriented view of the overall profitability of the company. By analyzing return on investment for marketing activities, along with other financial metrics such as customer lifetime value, companies can gain a comprehensive understanding of their financial status. This empowers them to make data-driven decisions and prioritize investments that yield the highest returns (Waller, 2007).

Add to what has been presented that it is necessary to emphasize that upon completing the implementation of marketing plans or campaigns, it is important to analyze their effectiveness to ensure maximum return on investment. Through conducting an analysis of marketing investment returns, strategies that work well and those that may need adjustments can be identified (Doğan and Mecek, 2015). Measuring marketing return on investment is an ongoing process, and regularly monitoring these metrics will help the company stay ahead and drive sustainable growth operations (Al-Nimer et al., 2015).

The literature related to marketing and marketing investments have outlined more than one indicator through which marketing investment returns can be evaluated. These indicators include:

1) Marketing Intensity (MTS): This indicator measures and analyzes the contribution of financial sacrifices related to marketing activities and operations, representing the total cost of marketing to promote the sales value achieved during a specific period (Garbiah and Levent, 2021).

2) Marketing Expense-To-Total Operating Expenses (MTOE): This indicator measures and analyzes the share of financial sacrifices related to marketing activities and operations, representing the total cost of marketing as a percentage of total operating costs during a specified period (Garbiah and Levent, 2021).

3) Return on Marketing Investment (ROMI): This is the return obtained by the

company as a result of additional investments in marketing activities. Analyzing ROMI is important as it illustrates the revenues of the marketing campaign against its total cost. This is crucial for determining the most cost-effective strategies to enhance profitability and documenting and measuring the effectiveness of marketing strategies in the company in terms of their costs (Meffert and Jesko, 2008). While a high ROMI value indicates a successful marketing investment, it is essential to consider that ROMI may vary depending on the marketing channels used, the type of business, and the goals of marketing campaigns (Waller, 2007).

2.2. Profitability and its metrics

Companies strive to achieve their goals to ensure their continuity by acquiring a market share that guarantees efficiency and effectiveness. Profitability is considered one of the most important objectives that ensures the achievement of these goals (Al-Shahadah et al., 2023). Profitability is a cornerstone that companies seek to achieve in order to improve their financial capabilities, aiming to gain customer trust, increase competitiveness, and attract investors. Companies aim to increase their profits by achieving positive cash flows to the greatest extent with the least possible cost (Rahaman et al., 2018). Profitability is a primary goal for all profit-oriented entities, essential for their survival and continuity. Profitability is a crucial tool for measuring the efficiency of management in utilizing available resources (Alqudah et al., 2023). It expresses the relationship between earned profits and the investments that contributed to achieving those profits (Amirpour and Mohammad, 2015). Profitability is measured either by the relationship between profits and sales or through the relationship between profits and the investments that contributed to them (Alshehadeh et al., 2022a).

Profitability is defined as the net result of policies, procedures, and decisions that reflect the effectiveness of companies in using available financial resources (Alshehadeh and Al-Khawaja, 2022). It is considered an indicator of good financial health and the efficiency of the company's management of its operational activities, demonstrating its ability to achieve positive current and future cash flows and appropriate returns. Profitability represents the company's ability to generate income, and profit analysis is of utmost importance to shareholders since the profits they receive are from the value of realized profits (Rahaman et al., 2018). Profitability is also highly important for creditors as the value of realized profits enables them to assess the ability to repay their debts (Al Omari et al., 2017). Profitability is an indicator to assess the current and future financial performance of the company (Al-Nimer et al., 2015).

Profitability, from another perspective, serves as a measure to interpret the operational efficiency of companies and is the positive outcome of optimal use of available resources (St-Hilaire and Boisselier, 2018). In this context, profitability represents the company's ability to generate revenue through available resources and investments, which should exceed the expenses incurred over a specific period. The higher this indicator, the greater the satisfaction of investors, creditors, and management with the business results (Alshehadeh et al., 2022a). Profitability, in its broad sense, signifies the company's capacity to achieve profit and generate current

and future cash flows (Gitman and Zutter, 2015). Therefore, profitability reflects the relationship between profits and sales, or the relationship between profits and investments that contributed to the company's profit. Profitability serves as a measure of the company's efficiency and its ability to sustain, helping to determine the success or failure of the company in achieving its goals (Alshehadeh et al., 2022a).

There are measures of profitability used to assess how companies utilize and manage their funds more efficiently. The most important of these measures, as highlighted in accounting literature, include:

1) Return on assets (ROA): ROA is a general measure of profitability (Al-Nimer et al., 2015). This indicator measures the company's ability to generate profits from the assets invested in it or the effectiveness of using available resources. It reflects the assets' ability to generate income regardless of the funding sources, whether from shareholders or external sources (Al Omari et al., 2017). Therefore, this indicator is of special importance to the company's management as well as to the owners or lenders. A higher ROA indicates optimal use of available resources, suggesting that the company seeks higher relative profits when compared to its assets, signifying more capital efficiency in managing its assets (Xu and Wang, 2018).

2) Return on equity (ROE): This measure is commonly used for financial performance evaluation and indicates the returns generated by the company from funds invested by shareholders in stocks, in addition to undistributed profits and allocations (Akgun et al., 2018). ROE represents the relationship between net profits after taxes and the size of investments by shareholders (Kadar and Rikumahu, 2018). ROE is an indicator that measures the output achieved by investing owners' funds. A higher ROE suggests efficient management in utilizing available resources, although a high ROE could also indicate high risk resulting from the company's inclination toward loans for financing with low returns on assets (Rahaman et al., 2018).

3) Gross profit margin (GPM): GPM is an important measure that gauges a company's success in controlling cost elements to generate the maximum profit from its core activities (Akgun et al., 2018). It is used to measure the company's ability to achieve profits from its core activities (Kadar and Rikumahu, 2018). GPM is an indicator of management's efficiency in dealing with the elements that constitute the cost of goods sold. It also serves as an indicator of how much the sales revenue can be reduced before gross profit turns negative (St-Hilaire and Boisselier, 2018).

4) Operating profit margin before interest and taxes (OPM): OPM indicates the company's ability to achieve operational profits resulting from its core activities. It measures profitability solely from the company's core activity, reflecting the relationship between operating profit and sales (Akgun et al., 2018). OPM is used as a measure of operating efficiency because management cannot control interest, taxes, or other gains and losses. Therefore, a thorough examination of all expense items should be conducted to identify trends in expenses and address any issues, which is essential for control measures and performance evaluation (Gitman and Zutter, 2015).

2.3. Sustainable growth and its metrics

Financial growth indicators are of special value to companies as they consolidate both financial or operational returns and non-financial returns into a unified and

comprehensive measure (Alshehadeh et al., 2023a). Sustainable financial growth indicators hold particular importance compared to other performance indicators due to their use by investors in assessing and judging a company's future growth plans, comparing them to current performance (Mihai et al., 2020). Companies strategically utilize their resources to achieve good returns, enabling them to sustain and thrive in the market (Oudat et al., 2020). As these returns increase, companies maximize the wealth of their shareholders by distributing a portion of their earnings and retaining the rest to invigorate investment operations (Alghusin et al., 2020). But how can investors and stakeholders understand the long-term growth of companies? According to Amouzesh et al. (2011), two indicators can help assess the sustainable growth gap:

1) Actual Growth Rate (ARG)

The actual growth rate is defined as the maximum growth rate a company can achieve without the need for external financing, relying on internal funding sources. The use of internal funding comes in the absence of a necessary requirement for external financing (Higgins, 1977). This rate also signifies the company's ability to expand without external financing, essentially indicating a decrease in financial leverage (Manaf, 2018). Ross et al. (2016) emphasized the importance of determining the relationship between internal growth and external financing by calculating the actual growth rate, highlighting its significance in assessing the efficiency of using available internal resources to generate positive cash flows.

2) Sustainable Growth Rate (SGR)

Sustainability at the corporate level involves a company's ability to achieve long-term strategic goals by maintaining a certain level of return on equity, thus preserving profitability in the long run (Ghardallou, 2022). Financial sustainability, on the other hand, refers to a company's ability to sustain sufficient liquidity to cope with potential financial crises, thereby increasing its ability to cover the costs it incurs (Alshehadeh et al., 2023b). Higgins (1977) suggested using the sustainable growth rate as the maximum growth achievable by the company through its sales while retaining a specific set of financial policies. The sustainable growth rate is a valuable tool for long-term financial planning, assisting managers in balancing actual operational performance with the company's financial policy (Ross et al., 2016). It represents the growth a company can maintain through generated sales without the need for additional funding (Xu and Wang, 2018). In other words, the sustainable growth rate is the maximum pace of sales growth that a company can maintain without issuing additional equity or changing its current financial policy (Mukherjee and Sen, 2018). The SGR for companies is considered the maximum rate achievable by the company under its financing policy, maintaining the debt-to-equity ratio and avoiding external financing through stock issuance (Ross et al., 2016).

It also represents the maximum rate a company can achieve by increasing revenues through the effective use of its financial resources (El Qirem et al., 2023). These metrics are valuable as they integrate operational activities such as profit and asset efficiency with financial activities such as capital structure and retained earnings (Xu and Wang, 2018). Therefore, the sustainable growth rate describes optimal growth from a financial perspective, assuming a clear financial framework with explicit terms and constraints (Amouzesh et al., 2011). It is used to assess a company's creditworthiness, allowing companies to compare actual and sustainable growth rates,

and helping them understand why the company needs funds and the extent to which this need will continue. This analysis also enables analysts and investors to determine the maximum growth rate a company can achieve without requiring external financing (Mukherjee and Sen, 2018).

3. Methods

3.1. Study population and sample

The study population consists of the Jordanian service companies listed on the Amman Stock Exchange, totaling (135) companies. A purposive sample of (55) companies was selected from the study population. The sample selection was based on the following reasons: first, the homogeneous nature of the activities of these companies; second, the availability of primary data and financial reports during the study period from 2008 to 2022; and third, the continuous trading of their stocks on the stock exchange throughout the study period.

3.2. Data collection and analysis methods

The applied methodology relies on the reports and annual financial statements issued by the sample companies during the period from (2008 to 2022). These data were categorized according to the study variables and tested using appropriate statistical methods, particularly arithmetic mean calculations, standard deviations, and multiple regression analysis. This was done to verify the study hypotheses, answer the research questions, and arrive at the results.

3.3. Study variables and measurement

The Independent Variable: It is represented by the dimensions of marketing investment:

1) MTS = Marketing Intensity = Marketing Costs/Total Sales (Garbiah and Levent, 2021).

2) MTOE = Marketing Expense-To-Total Operating Expenses = Marketing Costs/Total Operating Expenses (Garbiah and Levent, 2021).

3) ROMI = Return on Marketing Investment = Incremental Revenue Attributable to Marketing – Marketing Costs/ Marketing Costs (Meffert and Jesko, 2008).

The Dependent Variable: Profitability and Sustainable Growth Dimensions:

1) ROA = Net Income after Taxes + [Interest Expense − (1-tax Rate)]/Average Total Assets (Akgun et al., 2018).

2) ROE = Net Income after Taxes/Average Total Equity (Kadarand Rikumahu, 2018)

3) GPM = Gross Profit/ Net Sales (Akgun et al. 2018).

4) OPM = Operating Profit before Interest and Taxes/Net Sales (Kadarand Rikumahu, 2018).

5) ARG=Retained earnings ratio × Return on equity/1 − Retained earnings ratio × Return on equity (Ross et al., 2016).

6) SGR = Net profit ratio × Asset turnover ratio × Retention rate × Equity multiplier (Xu and Wang, 2018).

Control Variables: These variables are represented by both the company size (SC) and financial leverage (LR). The company size is measured using the natural logarithm of the total assets. Financial leverage, on the other hand, is measured by the ratio of long-term debt to total assets (Lamerikx, 2012).

3.4. Study models

The First Model: Represents the dimensions of marketing investment as an independent variable in profitability as a dependent variable.

$$\text{ROA it} = \beta 0 + \beta 1\ (\text{MTS it}) + \beta 2\ (\text{MTOE it}) + \beta 3\ (\text{ROMI it}) + \beta 4\ (\text{SC it}) + \beta 5\ (\text{LR it}) + \varepsilon \text{it} \quad (1)$$

$$\text{ROE it} = \beta 0 + \beta 1\ (\text{MTS it}) + \beta 2\ (\text{MTOE it}) + \beta 3\ (\text{ROMI it}) + \beta 4\ (\text{SC it}) + \beta 5\ (\text{LR it}) + \varepsilon \text{it} \quad (2)$$

$$\text{GPM it} = \beta 0 + \beta 1\ (\text{MTS it}) + \beta 2\ (\text{MTOE it}) + \beta 3\ (\text{ROMI it}) + \beta 4\ (\text{SC it}) + \beta 5\ (\text{LR it}) + \varepsilon \text{it} \quad (3)$$

$$\text{OPM it} = \beta 0 + \beta 1\ (\text{MTS it}) + \beta 2\ (\text{MTOE it}) + \beta 3\ (\text{ROMI it}) + \beta 4\ (\text{SC it}) + \beta 5\ (\text{LR it}) + \varepsilon \text{it} \quad (4)$$

$$\text{ARG it} = \beta 0 + \beta 1\ (\text{MTS it}) + \beta 2(\text{MTOE it}) + \beta 3\ (\text{ROMI it}) + \beta 4\ (\text{SC it}) + \beta 5\ (\text{LR it}) + \varepsilon \text{it} \quad (5)$$

$$\text{SGR it} = \beta 0 + \beta 1\ (\text{MTS it}) + \beta 2(\text{MTOE it}) + \beta 3\ (\text{ROMI it}) + \beta 4\ (\text{SC it}) + \beta 5\ (\text{LR it}) + \varepsilon \text{it} \quad (6)$$

The Second Model: Represents the dimensions of marketing investment as an independent variable in sustainable growth as a dependent variable:

3.5. Study hypotheses

H01: There is no significant effect at the level ($\alpha \leq 0.05$) between the dimensions of marketing investment in the service companies listed on the Amman Stock Exchange and their profitability indicators.

H02: There is no significant effect at the level ($\alpha \leq 0.05$) between the dimensions of marketing investment in the service companies listed on the Amman Stock Exchange and their sustainable growth indicators.

4. Results

To test the first hypothesis of the study, the correlation coefficient was calculated between each dimension of marketing investment measures in the service companies listed on the Amman Stock Exchange and achieving profitability indicators (**Table 1**). **Table 1** indicates the multiple linear regression analysis to test the impact of variables of marketing investment indicators in the sector of listed service companies on the gross profit margin index. Considering the correlation coefficient (R) value, it was found to be (0.106), indicating a negative impact of all variables of marketing investment indicators on the gross profit margin variable. The coefficient of determination (R^2) was (0.085), indicating the explanatory power of the independent variable in the dependent variable. Thus, (8.5%) of the variation in the dependent variable is caused by the independent variable. The (F) value was (42.837), with a p-value of (0.000), suggesting that the regression model is statistically significant. The regression equation is not equal to zero, and there is at least one variable statistically significant in the regression model. Therefore, the null hypothesis can be rejected, and the alternative hypothesis accepted, thus there is a significant effect at a level ($\alpha \leq 0.05$) between marketing investment indicators in the sector of listed service companies in the Amman Stock Exchange and the gross profit margin index.

Table 1. Summary of multiple linear regression analysis between marketing investment indicators and gross profit margin index.

Dependent Variable	Correlation Coefficient *R*	Coefficient of Determination R^2	*f*-value	*p*-value	Independent Variables	Beta	Standard Error	*t*-value	*p*-value
GPM	0.106	0.085	42.837	0.000	Constant	0.089	0.807	11.538	0.001
					MTS	−0.017	0.908	−10.368	1.759
					MTOE	−0.023	1.276	−8.386	0.480
					ROMI	−0.115	0.765	−5.572	0.001
					SC	0.087	13,363,861.28	6.230	0.000
					LR	0.079	12,536,304.90	5.209	0.002

Table 2 indicates the multiple linear regression analysis to test the impact of marketing investment indicators in the sector of listed service companies in the Amman Stock Exchange on the operating profit margin index before interest and taxes. Considering the correlation coefficient (*R*) value, it was found to be (0.152), indicating a positive impact of the variable (ROMI) on the dependent variable. Meanwhile, there is a negative impact of the variables (MTOE, MTS) on the dependent variable. The coefficient of determination (R^2) was (0.076), indicating the explanatory power of the independent variables in the dependent variable. Thus, (7.6%) of the variation in the dependent variable is caused by the independent variables. The (*F*) value was (37.538), with a *p*-value of (0.000), suggesting that the regression model is statistically significant. The regression equation is not equal to zero, and there is at least one variable statistically significant in the regression model. Therefore, the null hypothesis can be rejected, thus there is a significant effect at a level ($\alpha \leq 0.05$) between marketing investment indicators in the sector of listed service companies in the Amman Stock Exchange and the operating profit margin index before interest and taxes.

Table 2. Summary of linear regression analysis between marketing investment indicators and operating profit margin before interest and taxes.

Dependent Variable	Correlation Coefficient *R*	Coefficient of Determination R^2	*f*-value	*p*-value	Independent Variables	Beta	Standard Error	*t*-value	*p*-value
OPM	0.152	0.076	37.538	0.000	Constant	0.526	0.862	5.264	0.0002
					MTS	−0.231	0.564	8.235	4.029
					MTOE	−0.326	0.709	7.564	2.146
					ROMI	0.239	1.592	9.276	0.001
					SC	0.086	11,203,864.73	10.265	0.008
					LR	0.123	18,230,576.35	4.265	0.001

Table 3 indicates the multiple linear regression analysis to test the impact of marketing investment indicators in the sector of listed service companies in the Amman Stock Exchange on the return on assets index. Considering the correlation coefficient (*R*) value, it was found to be (0.218), indicating a positive impact of the combined marketing investment variables on the dependent variable (ROA). The coefficient of determination (R^2) was (0.137), indicating the explanatory power of the independent variables in the dependent variable. Thus, (13.7%) of the variation in the

dependent variable is caused by the independent variables. The (*F*) value was (24.531), with a *p*-value of (0.000), suggesting that the regression model is statistically significant. The regression equation is not equal to zero, and there is at least one variable statistically significant in the regression model. Therefore, the null hypothesis can be rejected, and the alternative hypothesis accepted, thus there is a significant effect at a level ($\alpha \leq 0.05$) between marketing investment indicators in the sector of listed service companies in the Amman Stock Exchange and the return on assets index.

Table 3. Summary of multiple linear regression analysis between marketing investment indicators and return on assets.

Dependent Variable	Correlation Coefficient *R*	Coefficient of Determination (R^2)	*f*-value	*p*-value	Independent Variables	Beta	Standard Error	*t*-value	*p*-value
ROA	0.218	0.137	24.531	0.000	Constant	0.126	0.186	10.238	0.001
					MTS	0.146	0.568	12.237	0.934
					MTOE	0.128	0.897	5.294	0.000
					ROMI	0.135	0.560	9.216	0.001
					SC	0.219	11,023,956.03	4.295	0.003
					LR	0.327	17,289,716.59	7.156	0.000

Table 4 indicates the multiple linear regression analysis to test the impact of marketing investment variables in the sector of listed service companies in the Amman Stock Exchange on the return on equity index. Examining the correlation coefficient (*R*), it was found to be (0.095), indicating a positive impact of variables (ROMI, MTS) on the dependent variable (ROE). However, there is a negative impact of the variable (MTOE) on the dependent variable. The coefficient of determination (R^2) was (0.051), demonstrating the explanatory power of the independent variables in the dependent variable. Thus, (5.1%) of the variation in the dependent variable is attributed to the independent variables. The calculated (*F*) value was (26.108), with a p-value of (0.000), indicating that the regression model is statistically significant. The regression equation is not equal to zero, and there is at least one variable statistically significant in the regression model. Therefore, the null hypothesis can be rejected, and the alternative hypothesis accepted, thus there is a significant effect at a level ($\alpha \leq 0.05$) between marketing investment variables in the sector of listed service companies in the Amman Stock Exchange and the return on equity index.

Table 4. Summary of multiple linear regression analysis between marketing investment indicators and return on equity index.

Dependent Variable	Correlation Coefficient *R*	Coefficient of Determination R^2	*f*-value	*p*-value	Independent Variables	Beta	Standard Error	*t*-value	*p*-value
ROE	0.095	0.051	26.108	0.000	Constant	0.953	0.235	11.206	0.002
					MTS	0.078	1.256	8.296	0.002
					MTOE	−0.084	0.956	−4.210	0.839
					ROMI	0.065	0.865	9.068	0.000
					SC	0.109	82,365,102.87	10.579	0.001
					LR	0.138	10,231,596.71	13.561	0.002

Table 5 indicates the multiple linear regression analysis to test the impact of marketing investment variables in the sector of listed service companies in the Amman Stock Exchange on the actual sustainable growth index. Examining the correlation coefficient (*R*), it was found to be (0.105), indicating a positive impact of the return on marketing investment variable (ROMI) on the dependent variable (ARG). However, there is a negative impact of variables (MTOE, MTS) on the dependent variable (ARG). The coefficient of determination (R^2) was (0.043), demonstrating the explanatory power of the independent variables in the dependent variable. Thus, (4.3%) of the variation in the dependent variable is attributed to the independent variables. The calculated (*F*) value was (18.296), with a *p*-value of (0.000), indicating that the regression model is statistically significant. The regression equation is not equal to zero, and there is at least one variable statistically significant in the regression model. Therefore, the null hypothesis can be rejected, and the alternative hypothesis accepted, thus there is a significant effect at a level ($\alpha \leq 0.05$) between marketing investment indicators in the sector of listed service companies in the Amman Stock Exchange and the actual sustainable growth index.

Table 5. Summary of multiple linear regression analysis between marketing investment indicators and the actual sustainable growth index.

Dependent Variable	Correlation Coefficient *R*	Coefficient of Determination R^2	*f*-value	*p*-value	Independent Variables	Beta	Standard Error	*t*-value	*p*-value
ARG	0.105	0.043	18.296	0.000	Constant	0862	0.153	6.026	0.001
					MTS	−0.056	0.853	−8.521	0.934
					MTOE	−0.086	0.090	3.156	0.759
					ROMI	0.293	0.826	5.129	0.000
					SC	0.172	92,103,056.17	11.286	0.002
					LR	0.167	11,238,637.26	9.326	0.003

Table 6 indicates the multiple linear regression analysis to test the impact of marketing investment variables in the sector of listed service companies in the Amman Stock Exchange on the sustainable growth index. Examining the correlation coefficient (*R*), it was found to be (0.132), indicating a positive impact of variables (MTS, ROMI) on the dependent variable (SGR). However, there is a negative impact of the variable (MTOE) on the dependent variable (SGR). The coefficient of determination (R^2) was (0.074), demonstrating the explanatory power of the independent variables in the dependent variable. Thus, (7.4%) of the variation in the dependent variable is attributed to the independent variables. The calculated (*F*) value was (25.203), with a *p*-value of (0.000), indicating that the regression model is statistically significant. The regression equation is not equal to zero, and there is at least one variable statistically significant in the regression model. Therefore, the null hypothesis can be rejected, and the alternative hypothesis accepted: "There is a significant effect at a level ($\alpha \leq 0.05$) between marketing investment in the sector of listed service companies in the Amman Stock Exchange and the sustainable growth index."

Table 6. Summary of multiple linear regression analysis between marketing investment indicators and the sustainable growth index.

Dependent Variable	Correlation Coefficient *R*	Coefficient of Determination R^2	*F*-value	*p*-value	Independent Variables	Beta	Standard Error	*t*-value	*p*-value
SGR	0.132	0.074	25.203	0.000	Constant	0.843	0.876	9.482	0.000
					MTS	0.281	0.765	5.219	0.004
					MTOE	−0.356	1.002	−13.568	0.863
					ROMI	0.561	0.567	6.026	0.000
					SC	0.132	82,013,563.46	4.019	0.000
					LR	0.189	72,981,106.29	7.598	0.001

5. Discussion and conclusion

Building strong relationships with customers requires enhancing marketing investment to improve personal communication, exceptional customer service, multi-channel engagement, loyalty programs, and feedback-driven improvements. By focusing on these strategies, loyalty can be reinforced, profitability increased, and the foundation for sustainable company growth can be established. Sustainable financial growth reflects a company's ability to promote innovation and drive business growth through creative thinking and finding new ways to develop unique products and services that meet the changing needs of consumers by enhancing investment in marketing campaigns and strategies. Contemporary companies adopt various innovative strategies to increase their value, profitability rates, and sustainable growth (Alshehadeh, 2021). Among these strategies is increasing investment in marketing while rationalizing other operational expenses.

The significance of this study arises from the importance of marketing activity in general, and specifically, investing in it to impact revenue volume, thereby affecting financial performance and sustainable growth. The results of this study are crucial for various stakeholders, directly and indirectly, interested in the economies of service companies listed on the Amman Stock Exchange, including the management of these companies, current and prospective investors, financial analysts, and especially financial brokerage firms operating in the Amman Stock Exchange. There is considerable debate in the accounting, financial, and marketing literature about the analysis of financial benefits from marketing investment as a topic of utmost importance for both practitioners and researchers. Many companies consider marketing costs as a type of investment and expect them to be returned to the company in the form of positive cash flows that enhance profitability rates and sustainable growth indicators.

The results of this study converge and diverge from the findings of several previous studies that addressed the variables of this study. For instance, the study by Musaab et al. (2021) concluded that an increase in marketing investment has a positive impact on the company's value. There is an enhanced role and a positive relationship between marketing investment and the company's value, and marketing investment contributes to explaining performance indicators in the capital market. On the other hand, the results of Garbiah and Levent (2021) showed that an increase in the ratio of marketing investment to sales did not have a positive effect on market value or

company profitability. The increase in the ratio of marketing expenses to total operating expenses had a positive impact on both profitability and market value. Waller (2007) found that the additional increase in marketing investments has a significant role in increasing sales and, therefore, influencing profits. The study by Mitchell and Howard (2013) concluded that return on marketing investment (MROI) has an inverse relationship with achieving high profits and high financial performance. MROI is a weak measure of performance because a decrease in MROI is not always a sign of poor performance, and an increase in MROI is not always a sign of high performance.

Based on the previous results, it is emphasized that marketing investments should not be viewed separately from other operating expenses for companies. Companies that can control other operating expenses and increase the ratio of marketing investments to total operating expenses can achieve better financial performance. Marketing investment indicators can be used as a diagnostic tool and a measure to assess the efficiency of these investments in improving marketing profitability and the financial performance and growth of companies.

Author contributions: Conceptualization, ARA and IAEQ; methodology, ARA; software, SE; validation, GAE; formal analysis, ARA and IAEQ; writing—original draft preparation, ARA and GAE; writing—review and editing, IAEQ and SE; project administration, IAEQ. All authors have read and agreed to the published version of the manuscript.

Conflict of interest: The authors declare no conflict of interest.

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