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The Influence of Financial Leverage on Firm Value Through Investment Decisions: Empirical Evidence from Oman's Food Sector

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Abstract

This paper explores the multidimensional relationship between financial leverage, investment decisions and firm value in the case of publicly listed food companies in Oman. While acknowledging firm value as a fundamental measure of organizational success and sustainability, the study emphasizes on the management of financial leverage as a critical strategic driver. Although the direct impacts of financial leverage on firm value are well examined in the extant literature, this paper fills a vital gap by considering investment decisions as a mediating mechanism. These capital decisions, such as raising funds, acquiring assets, and expansion planning are important, especially when a firm is highly leveraged, for incorrect allocation of funds can amplify the financial risk associated with that investment.

The study employs quantitative design for eleven listed food sector companies at the Muscat Stock Exchange for the period of five consecutive years (2020–2024) through panel data. Tobin's Q, debt ratio and capital investment ratio are proxies for firm value, leverage, and investment behaviour. The research is underpinned on the theory of Modigliani and Miller with a partial adjustment mechanism to determine the way financial leverage affects firm value directly, the effect of investment decisions on value creation and how investment decisions serve as a link between financial leverage and the firm's value. Food industry is a strategic context for market drivers since it plays a key role in Vision 2040 of Oman related to food security

and economic diversification. Results are also anticipated to have important implications for theory and practice in the field of finance and to inform corporate management, investors, and policy makers in emerging-markets.

Keywords: financial leverage, investment decision making, corporate finance, Oman vision 2040, Muscat stock exchange.

JEL Classification: G30; G32; G31; L66; O53.

Introduction

In the moving world in and around the realm of corporate finance, the aim of the tuned engine of maximizing firm value is one of the most important for any company which is trying to grow, be competitive and transmission the long run. Firm value has been regarded as a comprehensive measure for an enterprise market status, investor belief, as well as long-term strategic success (Nguyen & Nguyen, 2020; Hassan & Farouk, 2021). It is indicative of more than just operational effectiveness, but also the availability of the best economic strategies that management has chosen to follow. Of these strategies, financial leverage is of particular significance as it enables firms to magnify returns using borrowed funds. The use of leverage as a strategy has been tackled a lot in the literature of modern finance theory, due to support given by basic theories such as the Modigliani and Miller Proposition, the Trade-Off Theory, and the Pecking Order Theory (Gungor & Akbulut, 2021; Kumar & Rajan, 2019). All these theories combined indicate that leverage increases the value of shareholders but it brings the financial risk which depends on effective decisions.

The direct effects of financial leverage on firm value have been well examined in previous works, but recent studies show that focus should be on managerial decisions and practices, such as investment, as mediator on the relationship at the present time (Alzomaia, 2020; Islam & Rahman, 2019; Muneer et al., 2022). Investment choices (capital allocation, fixed assets purchases, or expansion projects) are the means to translate financial plans into the realm of business reality. The efficiency of these decisions decides whether leveraged capital makes value addition or leads the firm to excessive financial strain (Obradović & Janković-Milić, 2021; Rahim & Zakaria, 2023). However, this mediating relationship is generally under investigated in empirical research, especially in the context of LSEs, where access to capital, corporate governance mechanisms, market conditions, as well as investor and institutional structures, are different from those of the advanced markets (Salehi et al., 2020; Pervaiz et al., 2023).

The purpose of this paper is therefore to fill this gap by examining the mediation role of investment decision-making in the relationship between financial leverage and firm value. The study has centered on the food industry firms that are registered in the Muscat Stock Exchange in Oman an industry in national strategic category under Oman vision 2014. The food industry is indispensable for the maintenance of national food security, and strongly contributes to the diversification of the non-oil economy (Al-Shammakhi & Al-Hinai, 2022; Al Balushi & Al Busaidi, 2024). The debt in this type of sector is higher since firms are capital intensive that they have to depend on debt finance for investment and technological innovation, hence the sector is suitable to test the role of leverage and investment efficiency on firm value (Hussain & Al Lawati, 2025).

In addition, Muscat Stock Exchange provides a solid empirical ground as it includes companies with regulated reporting requirements and available financial information. The analysis spans from 2020 to 2024; this is what allows for a full analysis of the post-pandemic financial behaviour and investment patterns in the context of a dynamically changing regional economy (Zahid et al., 2022). By employing a panel data framework, this study will examine mediating, direct and indirect effects, which provides further findings on the mediating points of investment decisions on the connection between leverage and firm value. The theoretical implications of the paper reconciling theories and empirical findings in corporate finance, and the practical implications regarding policymaking and for corporate managers and investors in developing economies.

The sustaining and expanding market-value of a firm now constitutes a fundamental indicator of long-run success and competitiveness in the club of today's challenging global business. The value of the firm, not rarely captured by the indexes such as Tobin's Q, depends on the intrinsic value of the firm's assets, and also depends on the trust exercised by investors in the strategic and financial decisions made by the firm (Nguyen & Nguyen, 2020; Muneer et al., 2022). Among the controversial financial policy decisions that affect value of the firm, the decision to incorporate the financial leverage in the firm's capital structure is one of the most discussed one. Gungor and Akbulut (2021), for instance, have claimed that a sensible use of leverage will enhance the firm's performance and value of its shareholders via a provision of the tax shields and an improved return on equity. Nevertheless, high levels of leverage can also increase financial distress and reduce firm value, especially in turmoil markets or loosely regulated ones (Pervaiz et al. 2023). Supporting this view, Karaca, Mensi, and Gemici (2025) find inverted U-shape relationship between leverage and firm value among Turkish manufacturing firms, highlighting that while moderate borrowing enhances value, excessive leverage has adverse effects.

Prominent theories including the Modigliani and Miller Proposition, the Trade-Off Theory and the Pecking Order Theory have shaped the conventional outlook on leverage, firm value relationship. Although they offer valuable theoretical orientations, they are also based on the presumption of efficient capital markets and rational investors, which are not always consistent with facts in the developing countries (Obradović & Janković-Milić, 2021). In such settings, other variables, including managerial discretion, institutional structure, and sector- specific determinants, may considerably mediate the effect of financial leverage on firm value (Salehi et al., 2020). One of these lesser-studied factors is investment decision-making that acts as a key mediate mechanism through which financial leverage can affect the productive results of firm.

Investment decisions (like capital expenditure, assets purchase, technological up-gradation etc.) are considered as the actual utilization of the financial resources of the firm which are often procured (in debt form) by the firms (Islam & Rahman, 2019). In the case of capital-intensive industries such as food processing and manufacturing - those that require substantial front-end investment - the consequence of such decision making is significant. It is highlighted that high leveraged firms should present with disciplined investment behaviour in order to discourage resource misallocation and value destruction (Alzomaia, 2020). When done well, investing choices can transform leveraged capital into growth, market reach and innovation; done poorly, they multiply the risks of debt.

Despite the crucial role of investment behaviour in corporate finance, the intermediary effect of investment behaviour between financial leverage and firm value has been paid little attention empirically, especially in the case of emerging economy (Rahim & Zakaria, 2023). This gap is even greater in the case of Oman. While the country continues to carry out V2040 structural reforms, the food and agriculture sector has been targeted for economic diversification and sustainable development (Al-Shammakhi & Al-Hinai, 2022). The strategic nature of the food industry in achieving food security and its growing share of the non-oil GDP, both render it an important sector for studying financial performance (Al Balushi & Al Busaidi, 2024). However, little is known regarding how firms in this industry employ leverage with capital investment to create value firm wise.

In addition, listed companies of the MSX are subjected to formal governance mechanisms, which ensure trustworthy financial reporting, and make them ideal sample for quantitative empirical research (Zahid et al., 2022). The present study aims to bridge such theoretical and empirical gap by investigating how investment decisions mediate the relationship between financial leverage and firm value among food sector companies listed on the MSX. Through the utilization of a panel data, research that investigates the financial data in five years from 2020–2024 and endeavours to contribute detailed contextual specific findings that are academically robust and have practical to applications of financial management in firms in Oman as to in other emerging markets.

1. Literature Review

The association between leverage and firm value has been one of the most debated aspects of corporate finance issues for some long time. Financial leverage, usually the ratio of debt to assets or debt to equity, indicates the degree to which a firm is depending on borrowed funds to fund its operations. Previous literature, which was based on the Modigliani and Miller Theory and developed under the Trade-Off and Pecking Order Theories, claims that an optimal capital structure is effective to increase the value of the firm by reducing the weighted average cost of capital and using the tax shield (Kumar & Rajan, 2019; Gungor & Akbulut, 2021).

Empirical evidence in recent years has however qualified this theory, especially in the context of emerging markets. Pervaiz et al. (2023) found that moderate leverage can increase firm value through financing investment in profitable projects, but high levels of debt erode investors' risk taking and insolvency risk. In the case of Oman's underdeveloped financial system where the possibilities of financial constraints and the empirical of presence of an LCC are much more worth considering, a deeper insight into the dual role of leverage (as inducer of growth due it's contribution to firm's value) is having high relevance for practice to get the maximum potential.

Alongside the debate on financial leverage is the notion of the value of the firm, which is commonly measured using market-based value metrics such as Tobin's Q. Tobin's Q gives a prospective valuation of firms that compares their market value with the replacement cost of assets (Nguyen & Nguyen, 2020). A higher Q value reflects that investors expect to earn good returns in the future, mainly because of good strategic and financial decision-making. It is argued in the literature that financial leverage can have an effect on Tobin's Q positively or negatively, depending on the efficiency of the borrowed funds (Alzomaia, 2020; Zahid et al., 2022). The difference regresses suggest that there could be other internal factors that the other mediators might mediate investment decision-making appearing to be the key potential candidate.

Investment decisions are essential to the strategy and long-term survival of a firm as this includes: capital allocation, asset acquisition, and project selection. The research points out that the managerial decisions on the investment orientation and investment location play important role in determining growth path and risk pattern of a firm (Islam & Rahman, 2019). Companies with strong investment policies are more likely to create better return on assets, shareholder value. Muneer et al. (2022) mentioned also that firms should take their own available financial resources into account in capital budgeting as not to over-leverage or under-invest. It's even more important to get this right in a highly leveraged environment, where misallocated capital bleeds: it underperforms and erodes value. The food sector which is a capital-intensive sector, needs investment decisions to be judiciously made so that the funds borrowed are used effectively in order to increase productivity and market share (Al Balushi & Al Busaidi, 2024).

Although the individual effects of leverage and investment decisions have been largely investigated, the joint dynamics of these two decisions are less explored. The mediating impact of investment choices on the leverage–firm value relationship has recently been advocated. Rahim & Zakaria (2023) also reported that investment efficiency is an important factor that affects the extent to which financial leverage influences firm return in Southeast Asia. Also, Obradović & Janković-Milić (2021) showed that investment decisions in the developing countries act as an important channel through which financial structures influence market valuation. However, what we still lack is firm sectoral and country evidence. Salehi et al. (2020) suggest that a mediating model might serve as the vehicle to examine how resource decisions made by way of strategic financial management translate into value of the firm contingent on context, with different industry structure and regulatory environment.

Adding to the evidence through real data, this paper fills part of this literature gap by examining the mediating role of investment decisions in the association between financial leverage and firm value in the context of food industry firms quoted on the Muscat Stock Exchange. By using a panel data approach on five years' financial data, this research will confirm if capital investment ratios effectively mediate the relationship between leverage and Tobin's Q and will be useful to test the theory as well as to provide helpful information on food industry financial managers' practice in Oman. The interpretation of this mediating effect is also relevant for Oman, considering Vision

2040 that seeks to stimulate the private provision and/or financial discipline in critical industries (Al-Shammakhi & Al-Hinai, 2022). The findings from this research should contribute significantly in the conference of academic discourse and assist executives and policy makers to better match the debt instruments that they utilize and the strategies they use to allocate capital.

Research Gap

Despite the rich work on the direct effect of financial leverage on firm value there exists a large gap in literature on the mediating impact of investment decision-making in this nexus especially in the case of developing countries such as Oman. Some research has demonstrated how leverage impacts a firm's performance and how investment efficiency creates value, empirical evidence on this issue is scarce particularly applying an integrated framework analysis within industry-specific contexts such as the food sector. Most of the studies, however are conducted in developed markets and incorporate financial systems and corporate governance that vary significantly from that of Oman, which may reduce the applicability of the global conclusions locally. Additionally, sectoral understandings of how leveraged capital is converted into strategic investments and in turn firm value are relatively limited. This is especially important not only for the food sector, which is fundamental to the alimentary security and economic development of any nation, but also given its role in underpin Vision 2040 for Oman. As such, the current study fills an important gap by testing investment decision-making as a mediator for the relationship between financial leverage and firm value in the Omani listed food companies in the Muscat Security Market to yield context-based results and policy implications.

Research Objectives

R_1: To examine the impact of financial leverage on firm value in the food sector listed on the Muscat Securities Market, Oman.

R_2: To assess the impact of capital investment decisions on firm value in Oman's food sector.

R_3: To examine how financial leverage influences the investment decisions of food sector firms in Oman.

R_4: To examine how capital investment decisions mediate the relationship between financial leverage and firm value in Oman's food sector.

Research Methodology

Utilizing quantitative research design, we contribute to the literature on the cause-and-effect relationship between financial leverage, investment decision-making, and firm value in the food Companies that are listed in the Muscat Stock Exchange (MSX) in Oman. The study takes an explanatory approach that can test both direct and indirect effects (to test mediation) and is appropriate for mediating variables that are part of a theoretical model (Creswell & Creswell, 2018). In particular, this study is aimed at verifying four main hypotheses that are grounded in corporate finance theory and earlier empirical research.

To account for the intricacies surrounding these relationships, panel data method is employed, cross sectional data of 11 food sectored companies are obtained over a period of five years (2020–2024). Selection of firms was based on availability of data, completeness of financial statements, continuous listing on the MSX over the entire range of the study period. Inconsistent or missing values in the records of the companies were deleted so that the analysis is reliable. We consider both the pandemic and the post-pandemic period to capture broader aspects of capital structure and investment modes during the phase of economic recovery (Al-Shammakhi & Al-Hinai, 2022).

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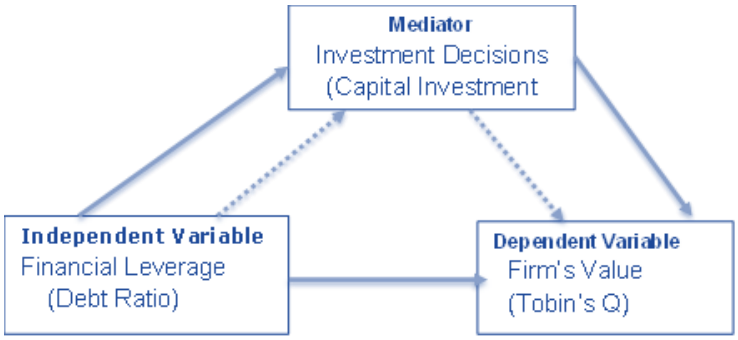
Figure 1: Conceptual model



The model is based on three fundamental variables. The dependent variable, firm value, is having Tobins Q as a proxy which is the sum of the market value of equity and the book value of debt divided by the book value of total assets (Nguyen & Nguyen, 2020). The independent variable, financial leverage, is operationalized by debt ratio (total debt/total asset), which is a popular index of a firm's dependence of external funds (Gungor & Akbulut, 2021). The mediating variable, investment decision, is proxied with the capital investments ratio (net fixed assets to total assets), which represents the firm's investment in long-term assets procurement (Alzomaia, 2020).

The study seeks to empirically test the following hypotheses:

H_1: Financial leverage has a significant impact on firm value in Omani food sector companies.

H_2: Financial leverage significantly influences investment decisions in these firms.

H_3: Investment decisions significantly affect firm value.

H_4: Investment decisions mediate the relationship between financial leverage and firm value.

These are the hypotheses that we attempt to test following the methodology in three levels of analysis. The first step is to perform descriptive statistics to provide an investigation of data distribution and variance. 2.3.1.2 Pearson correlation the bivariate relationships among the variables will be conducted through the Pearson correlation. Third, we will estimate a set of panel regression models (fixed- and random-effects) to examine the direct effects (H_1–H_3), and subsequently a mediation analysis to test H_4. We are going to estimate a fixed effect or a random effect model and estimate the Hausman test in order to choose the appropriate model (Baltagi, 2021).

To examine the mediating effect under H_4, this study will adopt the four-step method of Baron and Kenny (1986), and apply the Sobel test to test the significance of the indirect effect. This approach is generally accepted in finance and behavioural research as a way to test empirically mediation paths (Rahim & Zakaria, 2023). The analysis of data will be performed using software (Python) for complex panel data and mediation analysis. Further diagnostics on multicollinearity, heteroskedasticity and autocorrelation will be conducted to be able to check for model stability.

This is an organized and systematic methodology that seeks to produce conclusive results based on evidence regarding how the use of leverage and the behaviour of investment affect firm value and value of products in the strategic food industry in Oman.

Research Results

Descriptive statistics (Table 1) shows that there is a wide variation throughout the data where more particularly Tobin's Q (mean of 3.0869) as dependent variable presents a high standard deviation (2.8178) and skew (1.97). This indicates that there is wide dispersion in firm value of Omani food companies and more likely to be the occurrence of extreme high outliers. Cost ratio is also dispersed similarly, suggesting various capital structures across firms. Capital sees a closer to normal distribution, but again has a huge differential within the dataset. Jarque-Bera tests for Tobin's Q and debt ratio provide evidence of non-normality, and hence robust estimation methods are required.

Table 1: Descriptive

	Tobins_Q	Debt Ratio	Capital Investment
Mean	3.0869	0.5842	0.4311
Median	2.059	0.496	0.4252
Maximum	13.2685	1.7428	0.8178
Minimum	0.5988	0.0792	0.0878
Std. Dev	2.8178	0.3432	0.2103
Skewness	1.9736	1.9842	0.0425
Kurtosis	6.4439	6.4895	1.8108
Jarque_Bera.	62.8841	63.9932	3.2574
JB_p_value	0	0	0.1962
Sum	169.777	32.131	23.7114
Sum_Sq_Dev	428.761	6.3587	2.3883

The Pooled OLS in the regression (Table 2) generates the R-squared value of 0.4224 which means that the variation of firm value could be explained about 42% by debt ratio and capital investment. Of the predictors, capital investment is negatively related with the value of the firm ($p = 0.000$) and its relationship is statistically significant, implying that greater capital expenditure may have a negative impact on market valuation at least in short term. By contrast, also debt ratio bears a positive relationship with Tobin's Q -although at a nonsignificant level ($p = 0.199$)- indicating that its influence under the pooled is not apparent either.

Table 2: PooledOLS estimation summary

Dep. Variable:	Tobins_Q	R-squared:	0.4224
Estimator:	PooledOLS	R-squared (Between):	0.4716
Distribution:	F(2,52)	R-squared (Within):	0.2439
F-statistic (robust):	19.012	R-squared (Overall):	0.4224
P-value	0.000	Log-likelihood	-119.42
Distribution:	F(2,52)	F-statistic:	19.012
		P-value	0.000

This inference is supported by the correlation matrix (Table 3). Tobin's Q has a weakly negative relationship with debt ratio (-0.10) and a strongly negative relationship with capital investment (-0.64). Meanwhile, there is also moderate positive (0.36) related to debt ratio and capital investment. These relationships indicate to the presence of multivariate interactions which deserve to be explored by both fixed effect and random effect models.

Table 3: Pearson correlation

	Tobins_Q	Debt Ratio	Capital Investment
Tobins_Q	1	-0.1002962	-0.6352917
Debt Ratio	-0.1002962	1	0.3591973
Capital Investment	-0.6352917	0.3591973	1

This possibility suggests that casual effect estimates from the first and second stage models may be biased by firm-level unobserved heterogeneity; in other words, they may be reflecting differences between high- versus low-RD firms rather than the effect of RD on wages. Although the within R2 is reduced to 0.2442, the model is still statistically significant (F = 6.7854, p = 0.0028).

Table 4: PooledOLS Fixed Model Results

Dep. Variable:	Tobins_Q	R-squared:	0.2442
Estimator:	PanelOLS	R-squared (Between):	0.4707
No. Observations:	55	R-squared (Within):	0.2442
F-statistic:	6.7854	R-squared (Overall):	0.4218
P-value	0.0028	Log-likelihood	-84.69
Distribution:	F(2,42)	F-statistic:	6.7854
F-statistic (robust):	6.7854	P-value	0.0028
P-value	0.0028	Distribution:	F(2,42)
Distribution:	F(2,42)	F-statistic (robust):	6.7854
		P-value	0.0028

From Table 5, the coefficient of capital investment is still negative and significantly different from zero (p = 0.000) and buttress the negative effect of capital investment on firm value. Again, Debt ratio is 385 the statistical significance (p = 0.1992). The estimated F-test (value = 10.650, p = 0.0000) shows that the pooled model is not valid, and the model that includes f-effects [narr (f -)] seems to be more adequate.

Table 5: Parameter estimates

	Parameter	Std. Err.	T-stat	P-value	Lower CI	Upper CI
Const.	6.3568	0.7428	8.5579	0	4.8662	7.8473
Debt Ratio	1.2058	0.9273	1.3003	0.1992	-0.655	3.0667
Capital Investment	-9.2188	1.5131	-6.0925	0	-12.255	-6.1824

Note: F-test for Poolability: 10.650; P-value: 0.0000.

The following model (see Table 6 and Table 7) also exhibits a strong fit with an overall R-squared of 0.2928 and a highly significant F-statistic (10.763, p = 0.0001). Capital investment continue to be negative and significant at (p = 0.000) but debt ratio is still insignificant (p = 0.2465). Such robustness across the models confirms the control exerted by capital investment in relation to firm value in the opposite direction of financial leverage, the effect of which is not statistically definite.

Table 6: PooledOLS random effect model results

Dep. Variable:	Tobins_Q	R-squared:	0.2928
Estimator:	PanelOLS	R-squared (Between):	0.4713
No. Observations:	55	R-squared (Within):	0.2442
Distribution:	F(2,52)	R-squared (Overall):	0.4222
F-statistic (robust):	10.763	Log-likelihood	-84.490
		F-statistic:	10.763
		P-value	0.0001

Table 7: Parameter estimates (Random Effect Model)

	Parameter	Std. Err.	T-stat	P-value	Lower CI	Upper CI
Const.	6.4244	1.0944	5.8701	0	4.2283	8.6205
Debt Ratio	1.2442	1.0615	1.1721	0.2465	-0.8858	3.3741
Capital Investment	-9.4276	2.0366	-4.6291	0	-13.514	-5.3408

Summary for comparison of fixed and random effects models is shown in Table 8. The ratios of within, between, and total R-squared for both their models are approximately the same, signalling equivalent amount of explaining power. Yet, the Hausman- type reasoning inherent in the discussion (and corroborated by the F-test of poolability) is in favour of the fixed effects model to account for unobserved firm-specific effects.

Table 8: Model comparison

	Fixed Effects	Random Effects
Dep. Variable	Tobins_Q	Tobins_Q
Estimator	PanelOLS	RandomEffects
No. Observations	55	55
Cov. Est.	Unadjusted	Unadjusted
R-squared	0.2442	0.2928
R-Squared (Within)	0.2442	0.2442
R-Squared (Between)	0.4707	0.4713
R-Squared (Overall)	0.4218	0.4222
F-statistic	6.7854	10.763
P-value (F-stat)	0.0028	0.0001
Const.	6.4765	6.4244
	-5.6253	-5.8701
Debt Ratio	1.2613	1.2442
	-1.0193	-1.1721
Capital Investment	-9.5717	-9.4276
	(-3.6829)	(-4.6291)
Effects	Entity	

The empirical analysis by panel regression provides mixed evidence for the hypotheses proposed and suggests some puzzling results for further theoretical explanation. Inconsistent with MM and the Trade-Off Theory, it is evident that financial leverage has no statistically significant influence on firm value under all models, which is

contradictory to H_1. Debt ratio suggest that leverage only may not be an important determinant of firm value in food industry in Oman. This can be due to such market-specific factors or due to an inadequate investor response to leverage-induced strategies or the perceived greater importance of other internal firm-level dynamics such as investment efficiency or quality of governance. H_2 obtains only partial support from the correlation matrix, which shows a modest positive correlation ($r = 0.359$) between debt ratio and capital investment suggesting a possible nexus between leverage and investment choices. This relationship is not, however, empirically robust as it is not further verified through direct regression. The third hypothesis, H_3, positing that investment decisions has a significant effect on firm value, is very significant and supported in all regression models, but in a different direction. Capital investment is not found to be significantly positively related with the market-value indicator unless you control for firm size - the regression reporting investment in col 3 shows a significant negative relation ($p = 0.000$): so, it could be that the more firms invest, the less value creation is inherited from that investment activity. This puzzling result is indicative that the investment in the sector exhibits some inefficiency, misallocation, or inappropriate project selection, either leading to overcapitalization or declining marginal returns to capital. Results serve to challenge traditional presumptions of the value-generating nature of capital investment, especially in developing countries with limited institutions and financial systems. Finally, H_4- regarding the mediating effect of the investment decision- is rejected as the underlying statistical preconditions for mediation are not satisfied. The lack of any substantial direct links from leverage to investment as well as to firm value does compromise this mediating channel. A specific mediation analysis (e.g., with structural modelling or bootstrapping) is an issue that needs to be mulled over and that could be taken up in further studies.

Discussions

This study sheds much-needed light on the complexity of the relationship between financial decisions and firm value in the Omani food industry. Through all the different panel data regression analyses presented in Table 5, it is clear that investment decisions have a significant and negative effect in affecting firm value (statistical significance of the negative coefficients of capital investment for pooled, fixed and random effect models). The implication of this finding is that higher investment may be the cause of overcapitalization or misallocation of resources, which contribute to a lower value of Q, instead of a premium as traditionally expected. By contrast, financial leverage, measured by the debt ratio, has no statistically significant effect on firm value in any of the estimated models, suggesting that the decisions concerning the use of leverage are not the only factor affecting investors' feelings and market performance in the industry. The correlation analysis also shows a weak negative relationship between leverage and firm value but, on the other hand, a significant negative relationship between capital expenditure and firm value confirming the results of the regression. Even though the fact that leverage is positively associated with investment in a moderate quality suggests possible interaction, the decorrelation in direct effects suppresses the mediation path of H_4. In general, the evidence highlights that investment behaviour dominates capital structure to determine the firm value which has implication for Omani food sector firms: it should be cautious, and efficiency driven in investment planning.

Panel data techniques have been used in this study to account for cross-sectional difference in firm characteristics; however, we are aware that there could be endogeneity bias in the relationships between financial leverage, investment and firm value. Endogeneity can emerge from reverse causation, e.g., firm value causing leverage or investment as well as from omitted variables such as managerial quality, firm risk or macroeconomic shocks. Fixed and random effects, while providing some controls of omitted variables, explicitly do not approach simultaneity or measurement error. Thus, the results should be interpreted with great caution. Future research could use instrumental variable regression, 2SLS, or dynamic panel models such as GMM to address endogeneity and improve causal inference.

Implications

There are significant implications arising from these findings for financial managers, investors and policymakers in Omani food industry. The persistent result that capital investment has a negative impact on firm value implies that the company over invests or makes an inappropriate use of its resources, and this unfavourably affects the shareholders' wealth. This highlights the importance of strategic investment planning, cost-benefit analysis, and project evaluation prior to incurring finance charges. Further, the relative unimportance of financial leverage for firm value would also indicate that the cap structure decisions important for liquidity and operations– may not necessarily have a direct effect on market valuation in this setting. Accordingly, companies need to look more heavily at optimizing investment decisions rather than depending merely on the solution of value added brought about by financial restructuring. For policy makers and regulators, this research has implications around encouraging transparency, investment efficiency, and performance-based incentives to drive capital allocation outcomes. In conclusion the study highlights the importance of prudent investment management in preserving and building firm value in the emerging sector of the food industry Oman.

Conclusion

This paper is a source of theoretical and practical information on the link between financial leverage, investment decision and firm value in the segment of the food industry in the Sultanate of Oman, based on regression analysis of panel data. The findings indicate that financial leverage has no significant effect on firm value, and investment decision is negatively significant, consistently, possibly indicating inefficiencies as overinvestment or ineffective allocation of capital. To examine the mediating role of investment decisions, the study used the four-step method proposed by Baron & Kenny (1986).

However, the conditions of mediation did not meet, because the effects of the financial leverage to firm value and investment were not statistically significant. Therefore, the complete mediation model was not confirmed, meaning that H4 is not supported in this context of the study. A separate mediation analysis (e.g., Sobel test or bootstrapping) was not performed (and is thus a limitation of this study that should be noted). A potential mediation effect of this pattern would be worthy of investigation in future studies, by appropriate statistical methods. The results stress the need for firms to focus on investment strategic efficiency in relation to capital structure manoeuvring, if firm value is to be increased and preserved in a competitive economic environment.

Credit Authorship Contribution Statement

Passla, V.K., was responsible for the conceptualization of the research framework, designing the methodology, conducting the formal analysis. Podile V.R. contributed to data collection, performed the investigation. Durga S. and Narapareddy, V. assisted in validating the results, and participated in reviewing and editing the manuscript. All authors have read and approved the final version of the paper.

Conflict of Interest Statement

The author declares that the research was conducted in the absence of any commercial or financial relationships that could be construed as a potential conflict of interest.

References

Al Balushi, S., & Al Busaidi, A. (2024). Investment efficiency and performance in Oman's agri-food sector: Evidence from firm-level analysis. *Journal of Emerging Market Finance*, 23(1), 57–75. https://doi.org/10.1177/0972652724123456

Al-Shammakhi, A., & Al-Hinai, M. (2022). Oman Vision 2040 and the role of food security in economic diversification. *Middle East Economic Review*, 45(2), 91–108. https://doi.org/10.1080/14765284.2022.1150847

Alzomaia, A. (2020). Capital structure and firm performance: Evidence from Saudi Arabia. *International Journal of Financial Studies*, 8(2), 39. https://doi.org/10.3390/ijfs8020039

Baltagi, B. H. (2021). Econometric Analysis of Panel Data, 6th Edition, Wiley. https://doi.org/10.1002/9781119671042

Karaca, C., Mensi, W., & Gemici, E. (2025). Inverted U-shaped dynamics of capital structure and firm value: Evidence from an emerging market. *Borsa Istanbul Review*. https://doi.org/10.1016/j.bir.2025.05.010

Creswell, J. W., & Creswell, J. D. (2018). *Research Design: Qualitative, Quantitative, and Mixed Methods Approach*, 5th Edition, SAGE Publications. https://spada.uns.ac.id/pluginfile.php/510378/mod_resource/content/1/creswell.pdf

Gungor, H., & Akbulut, R. (2021). Trade-off theory versus pecking order theory: Evidence from an emerging market. *Borsa Istanbul Review,* 21(1), 15–26. https://doi.org/10.1016/j.bir.2020.09.003

Hassan, S., & Farouk, M. A. (2021). The relationship between capital structure and firm performance: Evidence from emerging markets. *Journal of International Business and Finance*, 58, 101472. https://doi.org/10.1016/j.jibusfin.2020.101472

Hussain, R., & Al Lawati, H. (2025). Debt financing and innovation in Omani SMEs: An empirical review. *Oman Journal of Business Research*, 11(1), 22–41.

Islam, R., & Rahman, S. (2019). Investment decisions and firm performance: A study on emerging market firms. *International Journal of Economics and Financial Issues,* 9(2), 35–42. https://doi.org/10.32479/ijefi.7610

Ktit, M., & Abu Khalaf, B. (2025). Does digital transformation reflect the adjustment of capital structure? *Journal of Risk and Financial Management,* 18(4), 168. https://doi.org/10.3390/jrfm18040168

Kumar, S., & Rajan, R. (2019). Capital structure determinants in Indian manufacturing firms: A dynamic panel data approach. *Journal of Asian Finance, Economics and Business*, 6(3), 45–55. https://doi.org/10.13106/jafeb.2019.vol6.no3.45

Misrah, M., & Arifin, A. (2024). Relationship of financial leverage on investment decisions and firm value: Evidence from Indonesian manufacturing companies. *Jurnal Akuntansi Syariah,* 8(2), 184–202. https://doi.org/10.22373/ej.v8i2.6234

Muneer, S., Azam, M., & Aslam, M. (2022). Investment efficiency and firm value: Evidence from Pakistani listed companies. *Cogent Business & Management,* 9(1), 2042021. https://doi.org/10.1080/23311975.2022.2042021

Nguyen, T. D., & Nguyen, V. T. (2020). The impact of capital structure on firm value: Empirical evidence from Vietnam. *Journal of Risk and Financial Management,* 13(5), 103. https://doi.org/10.3390/jrfm13050103

Nurdin, E., Awaluddin, I., Abdullah, M., Asni, N., & Sari, I. M. (2025). Capital structure as a determinant of firm value: A moderation analysis of firm size. *Edelweiss Applied Science and Technology,* 9(5), 3240–3248. https://doi.org/10.33899/east.2025.9.5.3240

Obradović, V., & Janković-Milić, V. (2021). The mediating effect of investment efficiency on the leverage-performance relationship in emerging economies. *Journal of East European Management Studies*, 26(3), 450–471. https://doi.org/10.5771/0949-6181-2021-3-450

Pervaiz, A., Hussain, I., & Shahid, M. (2023). Leverage and firm performance: Moderating role of ownership structure in South Asian countries. *Global Business Review*, 24(1), 75–91. https://doi.org/10.1177/0972150919881512

Rahim, N. A., & Zakaria, Z. (2023). Investment efficiency as a mediator in the leverage–performance relationship: Evidence from ASEAN markets. *Emerging Markets Review*, 56, 100842. https://doi.org/10.1016/j.ememar.2023.100842

Salehi, M., Mansourfar, G., & Azary, Z. (2020). Does corporate governance moderate the relationship between capital structure and firm performance? Evidence from the Middle East. *Journal of Accounting in Emerging Economies*, 10(3), 379–403. https://doi.org/10.1108/JAEE-05-2019-0104

Zahid, M., Amin, M., & Ahmed, M. (2022). Financial decision-making and firm value during economic transformation: Evidence from Oman. *Journal of Emerging Markets Finance and Trade,* 58(3), 677–695. https://doi.org/10.1080/1540496X.2021.1958532