JOURNAL OF MANAGEMENT AND BUSINESS SOLUTIONS

Explaining the Impact of Investor Sentiment on Financial Decisions Considering the Role of Financial Constraints in Companies Listed on the Tehran Stock Exchange

1. Soroush. Nourollahi : PhD student, Accounting Department, Bon.C., Islamic Azad University, Bonab, Iran
2. Nader. Rezaei: Department of Accounting , Bon.C., Islamic Azad University, Bonab, Iran
3. Ali. Jafari*: Department of Accounting , Bon.C., Islamic Azad University, Bonab, Iran
4. Asgar. Pakmaram: Department of Accounting , Bon.C., Islamic Azad University, Bonab, Iran

*corresponding author's email: alijafari1355@iau.ir

ABSTRACT

This study aimed to explain the impact of investor sentiment on financial decisions considering the role of financial constraints in companies listed on the Tehran Stock Exchange during the period from 2018 to 2024. A total of 144 companies were examined as the statistical sample of the study. In terms of objective, this research is classified as an applied study, and in terms of inference method, it falls within the category of descriptive-correlational research. The results obtained from testing the research hypotheses using pooled regression and panel data regression methods in EViews version 10 at the 95% confidence level indicated that financial constraints do not have a significant effect on the relationship between investor sentiment and leverage ratio. Financial constraints have a positive and significant effect on the relationship between investor sentiment and debt maturity. Furthermore, financial constraints have a positive and significant effect on the relationship between investor sentiment and the speed of leverage adjustment. This study provides practical insights into the economic consequences of increased leverage during periods of high investor sentiment on firm value for investors. The present research enhances the understanding of the impact of investor sentiment on firms' financial decisions.

Keywords: Investor sentiment, financial decisions, financial constraints.

Introduction

Financial decision-making in listed companies is one of the central issues in corporate finance because decisions related to leverage, debt maturity, and the speed of capital structure adjustment determine not only the firm's financing pattern but also its risk exposure, investment capacity, and market value. Traditional theories of finance generally assume that firms make financing decisions based on rational assessments of costs, benefits, tax shields, bankruptcy risk, agency conflicts, and information asymmetry. However, developments in behavioral finance have shown that financial markets are not shaped solely by rational expectations and fundamental information; rather, investors' psychological states, behavioral biases, optimism, pessimism, and collective market sentiment can affect asset prices, liquidity, financing conditions, and managerial decisions. In this regard, modern behavioral finance has challenged the purely rational foundations of portfolio selection and corporate financial behavior by emphasizing

Article history:
Received 11 March 2026
Revised 15 April 2026
Accepted 10 June 2026
Initial Publish 27 July 2026
Published online 01 November 2027

How to cite this article:
Nourollahi, S., Rezaei, N., Jafari, A., & Pakmaram, A. (2027). Explaining the Impact of Investor Sentiment on Financial Decisions Considering the Role of Financial Constraints in Companies Listed on the Tehran Stock Exchange. *Journal of Management and Business Solutions, 5*(6), 1-17. https://doi.org/10.61838/jmbs.339

the role of overconfidence, mental accounting, loss aversion, and affective reactions in investment and financing decisions (1-3). Therefore, investigating how investor sentiment affects corporate financial decisions is essential, especially in emerging markets where informational inefficiency, market volatility, and financing frictions are more pronounced.

Investor sentiment refers to the collective beliefs, expectations, and emotional evaluations of investors regarding future market conditions, firm performance, and asset prices. When sentiment is optimistic, investors may overvalue securities, increase trading activity, and create favorable conditions for firms to raise capital. Conversely, pessimistic sentiment may reduce liquidity, lower market valuation, increase the cost of external financing, and constrain firms' access to financial resources. Empirical evidence has shown that investor sentiment can predict current and future stock returns in emerging equity markets, indicating that sentiment is not merely a psychological phenomenon but also a market-level force with measurable financial consequences (4). Similarly, research on forward-looking statements, investor sentiment, and stock liquidity indicates that sentiment may influence liquidity conditions and the way market participants interpret corporate information (5). The importance of investor sentiment becomes even more evident in studies showing its role in stock price fluctuations, asset pricing, and return predictability (6-8). These findings suggest that sentiment can enter corporate financial decisions indirectly through market valuation, liquidity, and capital market timing.

The Tehran Stock Exchange provides a particularly relevant context for examining the relationship between investor sentiment and financial decisions because emerging capital markets are commonly characterized by higher information asymmetry, stronger behavioral reactions, greater sensitivity to macroeconomic and political uncertainty, and more severe financing constraints. In such markets, investor sentiment can affect both the demand side and the supply side of corporate financing. On the demand side, managers may respond to market optimism or pessimism by adjusting leverage, changing debt maturity, or accelerating capital structure adjustments. On the supply side, creditors, shareholders, and other financing providers may alter their risk perceptions and financing terms based on prevailing market sentiment. Iranian studies have also emphasized the behavioral dimension of investor decisions and firm valuation, showing that investors' tendencies, emotions, and sentiment can play a meaningful role in the valuation of companies listed on the Tehran Stock Exchange (9). Moreover, recent evidence from Iran and related markets shows that sentiment affects not only conventional equity markets but also newer speculative assets such as Bitcoin, indicating the broader relevance of behavioral forces in financial decision-making (10).

One of the most important financial decisions affected by market conditions is the leverage decision. Leverage reflects the extent to which firms rely on debt financing relative to assets or equity. Classical capital structure theories argue that firms move toward target leverage ratios by balancing the benefits and costs of debt, yet empirical evidence shows that firms do not adjust instantly to their target capital structure. Instead, they follow a partial adjustment process due to adjustment costs, market frictions, and financing constraints (11). The speed of adjustment toward target leverage is therefore a key indicator of how efficiently firms can revise their capital structure in response to internal and external conditions. Studies on capital structure dynamics have emphasized that firms differ substantially in their adjustment speed depending on corporate governance, debt capacity, information asymmetry, and market conditions (12-14). In the Iranian context, industry-level differences in the speed of capital structure adjustment have also been documented, suggesting that firm characteristics and market structure influence how quickly companies revise their financing mix (15).

Investor sentiment may affect leverage decisions through several mechanisms. During periods of high sentiment, equity may become relatively overvalued, encouraging firms to issue equity rather than debt. At the same time, optimistic market conditions may increase lenders' confidence and reduce the perceived risk of borrowers, thereby expanding debt capacity. Conversely, when sentiment is low, firms may face lower equity valuations and weaker market liquidity, making external financing more costly. The relationship between stock returns and capital structure has been examined in prior studies, suggesting that market valuation and stock price movements can influence leverage ratios mechanically and behaviorally (16). Furthermore, evidence on pecking order theory, debt capacity, and information asymmetry indicates that firms' financing choices depend on the relative costs of internal funds, debt, and equity under asymmetric information conditions (17). Since investor sentiment affects perceived information quality and market valuation, it can alter the relative attractiveness of financing sources and thereby influence leverage-related decisions.

Debt maturity is another major dimension of corporate financial decisions. Firms choose between short-term and long-term debt based on liquidity needs, refinancing risk, agency problems, interest rate expectations, and access to credit markets. Short-term debt may reduce agency costs and provide flexibility, but it also increases rollover risk and exposes firms to refinancing pressure. Long-term debt may stabilize financing but can be more expensive or less accessible for financially constrained firms. Financial constraints and asset structure are particularly relevant in determining debt maturity, because firms with stronger collateral capacity and more tangible assets may have better access to long-term borrowing (18). Evidence from the Tehran Stock Exchange also shows that financial constraint, asset structure, and financing patterns are closely interrelated (19). Therefore, investor sentiment may influence debt maturity by changing creditors' willingness to provide long-term funds and by affecting managers' expectations about future refinancing conditions.

Financial constraints are a central concept in this study because they determine the extent to which firms can respond to market sentiment when making financial decisions. Financially constrained firms face limitations in accessing external funds or must obtain financing at higher costs due to information asymmetry, insufficient collateral, weak cash flows, or higher perceived risk. The foundational literature on financing constraints and corporate investment argues that firms' investment behavior is sensitive to internal cash flows when external financing is costly or restricted (20). In Iran, the localized KZ index has been used to identify financing constraints and examine their effects on overinvestment and underinvestment, highlighting the relevance of financial constraints in corporate decision-making (21). Similarly, studies on investment cash flow sensitivity and business group membership indicate that access to internal capital markets and financing channels can affect investment behavior under constraint conditions (22). These findings imply that financial constraints may moderate the impact of investor sentiment on financial decisions, because constrained and unconstrained firms do not have equal capacity to exploit favorable market conditions or withstand unfavorable sentiment.

The moderating role of financial constraints is theoretically important because investor sentiment alone may not determine financial decisions unless firms are able or compelled to act on the financing opportunities and pressures created by sentiment. For unconstrained firms, high investor sentiment may provide additional financing flexibility, but these firms may already have access to diverse financing sources. For financially constrained firms, however, sentiment-driven changes in liquidity, market valuation, or creditor confidence may have stronger effects because such firms are more dependent on external financing conditions. Recent international evidence also shows that the effect of stock liquidity on leverage depends on debt security, financial constraint, and risk, especially around crisis

periods such as the global financial crisis and the COVID-19 pandemic (23). This suggests that financial constraints can alter the direction and strength of the relationship between market conditions and leverage decisions. Political connections may also affect financing policies by reducing financing frictions or improving access to resources, further demonstrating that firms' financing choices are embedded in institutional and constraint-related contexts (24).

The role of sentiment should also be viewed in relation to asset pricing and resource allocation. Modern portfolio theory and asset management research emphasize that capital allocation decisions depend on expected return, risk, diversification, and optimization principles (25). However, behavioral finance shows that sentiment may disrupt the rational allocation of resources by causing deviations between market prices and fundamental values. The risk-return puzzle literature has also questioned whether sentiment can fully explain anomalies in expected return patterns, suggesting caution in treating sentiment as a universal explanatory variable (26). This is important for the present study because the effect of sentiment on financial decisions may not be direct, uniform, or unconditional; instead, it may depend on firm-specific financial constraints, liquidity conditions, and capital structure characteristics. Accordingly, examining the interaction between investor sentiment and financial constraints can provide a more precise explanation of corporate financing behavior than studying sentiment alone.

In the context of capital structure adjustment, firms may revise leverage more quickly when external conditions make adjustment less costly. If investor sentiment improves market liquidity and increases the availability of capital, firms may be able to adjust leverage faster. Conversely, if firms are financially constrained, they may experience slower adjustment due to higher transaction costs, limited access to financing, and greater refinancing risk. Prior research on determinants of capital structure and adjustment toward long-run targets confirms that firms gradually adjust to target leverage rather than immediately adopting optimal ratios (27). In addition, evidence on corporate governance and capital structure dynamics suggests that firm-level governance mechanisms can affect adjustment speed by influencing managerial discipline and access to financing (12, 13). Therefore, the speed of leverage adjustment is not only a mechanical financial outcome but also an indicator of how firms interact with market signals, internal constraints, and external financing conditions.

The present study contributes to the literature by integrating three important streams of research: behavioral finance, capital structure dynamics, and financial constraints. Previous studies have separately examined investor sentiment and stock prices (6), investor sentiment and asset pricing (7), sentiment and market liquidity (5), financing constraints and investment behavior (20, 21), and capital structure adjustment (11, 15). However, fewer studies have simultaneously considered whether financial constraints change the effect of investor sentiment on firms' key financial decisions, including leverage ratio, debt maturity, and the speed of leverage adjustment. This gap is especially important in the Tehran Stock Exchange, where firms operate under conditions of macroeconomic uncertainty, inflationary pressures, financing limitations, and market volatility. By focusing on listed Iranian firms, the study provides evidence from an emerging market environment in which sentiment and constraints may have stronger practical implications than in more developed and liquid financial systems.

Another contribution of this study is its attention to the distinction between different types of financial decisions. Leverage ratio, debt maturity, and leverage adjustment speed represent related but conceptually distinct dimensions of financing policy. Leverage ratio reflects the overall level of debt usage, debt maturity reflects the temporal structure of debt obligations, and speed of adjustment reflects the dynamic process through which firms move toward desired capital structure. A firm may maintain a stable leverage ratio while altering debt maturity, or it

may change its adjustment speed without significantly changing its current leverage level. Therefore, examining these outcomes separately provides a more nuanced understanding of how sentiment and constraints shape corporate financial behavior. This distinction is consistent with studies showing that leverage, collateral, debt capacity, and asset tangibility operate through different channels in financing decisions (18, 23).

From a managerial perspective, understanding the interaction between investor sentiment and financial constraints can help corporate managers design more effective financing strategies. If investor sentiment improves access to capital, managers of constrained firms may use such periods to restructure debt, extend maturity, or adjust leverage toward target levels. If sentiment has no significant effect under certain conditions, managers should avoid relying on market optimism as a substitute for sound financial planning. From an investor perspective, the findings can clarify whether corporate financing changes during sentiment-driven periods reflect fundamental improvement or temporary market conditions. From a policy perspective, the study can inform regulators and market institutions about how behavioral forces and financing frictions interact in emerging capital markets. Since investor sentiment has been linked to valuation, returns, and liquidity, its implications for corporate financial policy deserve systematic empirical investigation (4, 5, 8).

Overall, the theoretical and empirical literature indicates that investor sentiment may influence corporate financial decisions through valuation, liquidity, perceived risk, and financing access, while financial constraints may intensify or weaken these effects depending on firms' ability to obtain external funds. The capital structure literature shows that firms gradually adjust leverage in response to market and firm-specific conditions (11, 27), while behavioral finance suggests that market participants' psychological states can affect prices and decisions beyond fundamentals (1, 3). Evidence from Iran further confirms the relevance of investor sentiment, behavioral tendencies, financial constraints, and capital structure adjustment in the Tehran Stock Exchange (9, 15, 19). Therefore, a comprehensive investigation of these relationships can deepen understanding of financing behavior in emerging markets and provide useful implications for managers, investors, and policymakers.

The aim of this study is to explain the effect of investor sentiment on financial decisions, including leverage ratio, debt maturity, and the speed of leverage adjustment, with emphasis on the moderating role of financial constraints among companies listed on the Tehran Stock Exchange during 2018–2024.

Methods and Materials

In terms of classification based on objective, the present study is considered an applied research project, and in terms of direction, it is classified as an ex post facto study. Applied research refers to the development of practical knowledge within a specific field. The ex post facto method is employed when the researcher investigates a subject after the occurrence of events. Furthermore, in terms of method and nature, the present study is descriptive-correlational. It is descriptive because its purpose is to describe the conditions or phenomena under investigation and to provide a clearer understanding of existing conditions. It is correlational because the study focuses on examining the relationships among variables. The present research investigates the relationships between variables and seeks to verify the existence of such relationships under current conditions based on historical data.

In this study, library resources such as Persian and English books, journals, and internet websites were used to collect data and information related to the research literature and theoretical foundations. The collection of required data and information from the financial statements of companies, explanatory notes, and board of directors' reports

was conducted through the electronic database of CODAL System and Rahavard Novin software. Data analysis was performed using Microsoft Excel and EViews version 10.

The statistical population of the study consisted of all companies listed on the Tehran Stock Exchange during the period from 2018 to 2024. To conduct the study, information related to companies listed on the Tehran Stock Exchange that met the following criteria was collected for each year from 2018 to 2024:

1. The companies had been listed on the stock exchange before 2018.
2. The companies were not banks or financial institutions (investment companies, financial intermediaries, holding companies, and leasing companies).
3. The fiscal year-end of the companies was March 20 of each year.
4. The companies had not changed their fiscal year during the research period.
5. The companies had no trading suspension exceeding three months.

The model related to the first hypothesis was specified as follows:

$$Lev_{i,t} = \alpha_0 + \beta_1 SENT_{i,t} + \beta_2 KZ_{i,t} + \beta_3 (SENT_{i,t} \times KZ_{i,t}) + \beta_4 PROF_{i,t} + \beta_5 Grow_{i,t} + \beta_6 Size_{i,t} + \beta_7 TANG_{i,t} + \varepsilon_{i,t}$$

The model related to the second hypothesis was specified as follows:

$$SDEBT_{i,t} = \alpha_0 + \beta_1 SENT_{i,t} + \beta_2 KZ_{i,t} + \beta_3 (SENT_{i,t} \times KZ_{i,t}) + \beta_4 PROF_{i,t} + \beta_5 Grow_{i,t} + \beta_6 Size_{i,t} + \beta_7 TANG_{i,t} + \varepsilon_{i,t}$$

The model related to the third hypothesis was specified as follows:

$$SOA_{i,t} = \alpha_0 + \beta_1 SENT_{i,t} + \beta_2 KZ_{i,t} + \beta_3 (SENT_{i,t} \times KZ_{i,t}) + \beta_4 PROF_{i,t} + \beta_5 Grow_{i,t} + \beta_6 Size_{i,t} + \beta_7 TANG_{i,t} + \varepsilon_{i,t}$$

In the above models:

$$Lev_{i,t}$$

represents the leverage ratio.

$$SDEBT_{i,t}$$

represents debt maturity.

$$SOA_{i,t}$$

represents the speed of leverage adjustment.

$$SENT_{i,t}$$

represents investor sentiment.

$$PROF_{i,t}$$

represents the ratio of operating income to total assets.

$$Grow_{i,t}$$

represents the ratio of market value to asset value.

$$Size_{i,t}$$

represents firm size.

$$TANG_{i,t}$$

represents the ratio of fixed assets to total assets.

Dependent Variables

Leverage Ratio:

The leverage ratio, denoted by Lev, is calculated by dividing total debt by total assets.

Debt Maturity:

Debt maturity, denoted by $SDEBT$, is calculated as the ratio of short-term debt to total debt. The rationale for using this ratio as a measure of debt maturity is that the greater the use of short-term debt, the shorter the maturity structure of a firm's debt. The selection of this variable is consistent with the studies of Dang et al. (2016).

Speed of Leverage Adjustment:

The speed of leverage adjustment, denoted by SOA, was measured as follows:

In this study, the market leverage ratio was used as the primary indicator for measuring the speed of changes in capital structure and leverage. One reason for using the market value of financial leverage is that the book value of equity is often merely an accounting figure used to balance the two sides of the balance sheet. This value may even become negative for firms with weak managerial performance. Moreover, the book value of some firms, particularly small firms, may have little correlation with market values. To demonstrate that market-value-based debt ratios better describe the relative ownership of creditors and shareholders, Welch (2004) employed the weighted average cost of capital approach. Furthermore, several studies, such as Welch (2004) and Leary and Roberts (2006), used market-value ratios to calculate financial leverage in examining firms' capital structures. Therefore, similar to the study of Chang et al. (2014), the present research employed the market leverage index to more accurately measure the speed of capital structure adjustment, calculated as follows:

$$MLEV_{it} = \frac{D_{it}}{(P_{it} + OS_{it} \times P_{it})}$$

Where:

$$D_{i,t}$$

represents the total book value of interest-bearing debt of firm $i$at time t.

$$OS_{i,t}$$

represents the total number of common shares held by shareholders of firm $i$at time t.

$$P_{i,t}$$

represents the stock price of firm $i$at time t.

Independent Variable

Investor Sentiment:

Investor sentiment is denoted by $SENT$. According to the findings of Lee and Swaminathan (2000) and Shiller (2000), high trading volume in the stock market indicates investor optimism toward stocks and the market, whereas low trading volume reflects investor pessimism. Therefore, changes in trading volume indicate investor sentiment. Based on this approach, investor sentiment was calculated using the following formula:

$$sent_{i,t} = \frac{vol_{i,t} - vol_{i,t-1}}{vol_{i,t-1}}$$

Where:

$$sent_{i,t}$$

represents firm investor sentiment.

$$vol_{i,t}$$

represents the trading volume of the company's stock at the end of the year.

$$vol_{i,t-1}$$

represents the trading volume of the company's stock at the beginning of the year.

Moderating Variable

Financial constraints were employed as the moderating variable in this study. Tehrani and Hessarzadeh (2009) localized the KZ index by ranking the values of each variable in the KZ index according to their relationship with financing constraints. Based on the positive or negative relationship of each variable with the KZ index, data were coded from one to five. For example, the debt ratio has a positive relationship with financing constraints; therefore, smaller values (first quintile) were assigned code 1, while larger values were assigned codes 2 to 5 (fifth quintile: code 5). Subsequently, to derive the KZ index equation, regression analysis was conducted between the actual variable values and the sum of the assigned codes. The KZindex adapted to Iranian economic conditions by Tehrani and Hessarzadeh (2009) is expressed as follows:

$$KZ_{IR} = 17.330 - 37.486C - 15.216Div + 3.394Lev - 1.402MTB$$

Where:

KZ_{IR}: Localized financial constraints index

C: Cash holdings divided by total assets

Div: Dividends paid divided by total assets

LEV: Financial leverage ratio

MTB: Tobin's Q ratio

The procedure for using this index is as follows: first, actual values are substituted into the KZ_{IR}equation to calculate the index value. By ranking the values from the smallest (first quintile) to the largest (fifth quintile), firms with financing constraints can be identified according to the following table.

Table 1. Probability of Financial Constraints

Probability of Financial Constraints	First Quintile	Second Quintile	Third Quintile	Fourth Quintile	Fifth Quintile
	0–20%	20–40%	40–60%	60–80%	80–100%
Firms considered financially constrained in this study	*				*

Control Variables

Operating Profit to Total Assets Ratio ($PROF$)

This variable is measured as operating profit divided by the book value of assets. More profitable firms generally possess greater retained earnings and therefore have less need for external financing.

Market Value to Asset Value Ratio ($GROW$)

This variable is calculated as the ratio of market value to the book value of assets.

Firm Size ($Size$)

Firm size is measured using the natural logarithm of total assets. Larger firms tend to have higher debt ratios because they have easier access to capital markets and are able to borrow at lower costs.

Fixed Assets to Total Assets Ratio ($TANG$)

This variable represents property, plant, and equipment divided by total assets. Firms with greater tangible assets generally possess higher debt capacity

Findings and Results

In this study, EViews 10 was used for data analysis. Table 2 presents the descriptive statistics of the research variables, including 1,008 observations. This table reports the mean, median, maximum, minimum, standard deviation, skewness, and kurtosis indices.

Table 2. Descriptive Statistics of the Variables

Variable	Symbol	Mean	Median	Maximum	Minimum	Standard Deviation	Skewness	Kurtosis
Leverage ratio	Lev	0.526	0.525	1.505	0.031	0.212	0.337	3.810
Debt maturity	SDEBT	0.892	0.926	1.000	0.352	0.103	-1.835	7.272
Speed of leverage adjustment	SOA	0.261	0.070	4.929	0.000	0.528	4.290	27.725
Investor sentiment	SENT	1.757	0.316	61.197	-0.993	6.520	5.030	28.696
Operating profit ratio	PROF	0.181	0.159	0.624	-0.613	0.157	0.111	3.464
Market value to asset value	Grow	2.863	1.749	38.028	0.089	3.690	4.419	30.293
Firm size	Size	15.261	15.007	21.571	11.361	1.690	0.819	4.044
Fixed asset ratio	TANG	0.248	0.204	0.933	0.006	0.186	1.000	3.553
Observations		1008	1008	1008	1008	1008	1008	1008

Variable Name	Value	Frequency	Frequency Percentage
KZ	0	741	73.51
KZ	1	267	26.49

Table 2 contains the descriptive statistics of the research variables. In this table, the lowest mean belongs to the operating profit ratio variable ($PROF$, and the highest mean belongs to the firm size variable ($Size$). In addition, the positive kurtosis coefficients indicate that the data distribution is more peaked than the normal distribution and that the data are concentrated around the mean.

The results obtained from estimating the first hypothesis testing model using the EGLS method are presented in Table 3.

Table 3. Estimation Results of the First Hypothesis Model

$$Lev_{i,t} = \alpha_0 + \beta_1 SENT_{i,t} + \beta_2 KZ_{i,t} + \beta_3 SENT_{i,t} \times KZ_{i,t} + \beta_4 PROF_{i,t} + \beta_5 Grow_{i,t} + \beta_6 Size_{i,t} + \beta_7 TANG_{i,t} + \varepsilon_{i,t}$$

Variable	Coefficient	Std. Error	t-Statistic	Prob.
SENT	-0.001	0.0006	-2.530	0.011
KZ	-0.005	0.006	-0.849	0.395
SENT × KZ	0.00006	0.0007	0.085	0.931
PROF	-0.630	0.024	-26.114	0.000
Grow	-0.0003	0.0007	-0.437	0.661
Size	-0.013	0.002	-4.999	0.000
TANG	-0.445	0.022	-19.539	0.000
Intercept (C)	0.967	0.040	23.887	0.000

Model Statistic	Value
Coefficient of determination	0.812
Adjusted coefficient of determination	0.796
Durbin–Watson statistic	1.643
F-statistic	59.459
Prob. F-statistic	0.000

The results reported in Table 3 show that the significance level of the F-test is 0.000, which is less than 0.05. Since the F-statistic indicates the overall validity of the model, it can be stated that the first hypothesis testing model is significant at the 95% confidence level and has high validity. The adjusted coefficient of determination of the first hypothesis model is 0.796. This value indicates that approximately 79% of the variations in the dependent variable are explained by the explanatory variables of the model. Since the Durbin–Watson statistic of the model is 1.643 and this value lies between 1.5 and 2.5, it can be stated that there is no autocorrelation in the first model.

First hypothesis: The results presented in Table 3 indicate that the calculated significance level (Prob.) for the $SENT \times KZ$variable is 0.931, which is greater than 0.05, and the coefficient of the variable is positive, equal to 0.00006. Therefore, it can be stated that financial constraints do not have a significant effect on the relationship between investor sentiment and leverage ratio. Accordingly, the first research hypothesis, stating that financial constraints have a significant effect on the relationship between investor sentiment and leverage ratio, is rejected at the 95% confidence level.

The results obtained from estimating the second hypothesis testing model using the EGLS method are presented in Table 4.

Table 4. Estimation Results of the Second Hypothesis Model

$$SDEBT_{i,t} = \alpha_0 + \beta_1 SENT_{i,t} + \beta_2 KZ_{i,t} + \beta_3 SENT_{i,t} \times KZ_{i,t} + \beta_4 PROF_{i,t} + \beta_5 Grow_{i,t} + \beta_6 Size_{i,t} + \beta_7 TANG_{i,t} + \varepsilon_{i,t}$$

Variable	Coefficient	Std. Error	t-Statistic	Prob.
SENT	-0.0004	0.0002	-2.089	0.037
KZ	-0.0004	0.002	-0.196	0.844
SENT × KZ	0.0006	0.0003	2.181	0.029
PROF	-0.035	0.006	-5.380	0.000
Grow	-0.0001	0.0002	-0.541	0.588
Size	0.005	0.0008	6.575	0.000
TANG	-0.060	0.009	-6.670	0.000
Intercept (C)	0.831	0.013	63.505	0.000

Model Statistic	Value
Coefficient of determination	0.838
Adjusted coefficient of determination	0.810
Durbin–Watson statistic	1.699

F-statistic	29.723
Prob. F-statistic	0.000

The results reported in Table 4 show that the significance level of the F-test is 0.000, which is less than 0.05. Since the F-statistic indicates the overall validity of the model, it can be stated that the second hypothesis testing model is significant at the 95% confidence level and has high validity. The adjusted coefficient of determination of the second hypothesis model is 0.810. This value indicates that approximately 81% of the variations in the dependent variable are explained by the explanatory variables of the model. Since the Durbin–Watson statistic of the model is 1.699 and this value lies between 1.5 and 2.5, it can be stated that there is no autocorrelation in the second model.

Second hypothesis: The results presented in Table 4 indicate that the calculated significance level (Prob.) for the $SENT \times KZ$variable is 0.029, which is less than 0.05, and the coefficient of the variable is positive, equal to 0.0006. Therefore, it can be stated that financial constraints have a positive and significant effect on the relationship between investor sentiment and debt maturity. Accordingly, the second research hypothesis, stating that financial constraints have a significant effect on the relationship between investor sentiment and debt maturity, is accepted at the 95% confidence level.

The results obtained from estimating the third hypothesis testing model using the EGLS method are presented in Table 5.

Table 5. Estimation Results of the Third Hypothesis Model

$$SOA_{i,t} = \alpha_0 + \beta_1 SENT_{i,t} + \beta_2 KZ_{i,t} + \beta_3 SENT_{i,t} \times KZ_{i,t} + \beta_4 PROF_{i,t} + \beta_5 Grow_{i,t} + \beta_6 Size_{i,t} + \beta_7 TANG_{i,t} + \varepsilon_{i,t}$$

Variable	Coefficient	Std. Error	t-Statistic	Prob.
SENT	-0.002	0.001	-1.621	0.105
KZ	-0.027	0.008	-3.114	0.001
SENT × KZ	0.002	0.001	1.982	0.047
PROF	-0.288	0.037	-7.602	0.000
Grow	-0.008	0.001	-6.420	0.000
Size	-0.033	0.004	-7.497	0.000
TANG	-0.046	0.032	-1.442	0.149
Intercept (C)	0.870	0.066	13.172	0.000

Model Statistic	Value
Coefficient of determination	0.616
Adjusted coefficient of determination	0.549
Durbin–Watson statistic	1.696
F-statistic	9.180
Prob. F-statistic	0.000

The results reported in Table 5 show that the significance level of the F-test is 0.000, which is less than 0.05. Since the F-statistic indicates the overall validity of the model, it can be stated that the third hypothesis testing model is significant at the 95% confidence level and has high validity. The adjusted coefficient of determination of the third hypothesis model is 0.549. This value indicates that approximately 54% of the variations in the dependent variable are explained by the explanatory variables of the model. Since the Durbin–Watson statistic of the model is 1.696 and this value lies between 1.5 and 2.5, it can be stated that there is no autocorrelation in the third model.

Third hypothesis: The results presented in Table 5 indicate that the calculated significance level (Prob.) for the $SENT \times KZ$variable is 0.047, which is less than 0.05, and the coefficient of the variable is positive, equal to 0.002. Therefore, it can be stated that financial constraints have a positive and significant effect on the relationship between

investor sentiment and the speed of leverage adjustment. Accordingly, the third research hypothesis, stating that financial constraints have a significant effect on the relationship between investor sentiment and the speed of leverage adjustment, is accepted at the 95% confidence level.

Discussion and Conclusion

The present study investigated the effect of investor sentiment on financial decisions with emphasis on the moderating role of financial constraints in companies listed on the Tehran Stock Exchange during the period 2018–2024. The findings demonstrated that financial constraints did not have a significant effect on the relationship between investor sentiment and leverage ratio, whereas financial constraints had a positive and significant effect on the relationship between investor sentiment and debt maturity as well as the relationship between investor sentiment and the speed of leverage adjustment. Overall, the results highlight that investor sentiment does not influence all dimensions of corporate financial decision-making in the same manner and that the role of financial constraints becomes more pronounced in dynamic and maturity-related financing decisions than in determining the overall leverage ratio.

The first hypothesis examined whether financial constraints moderate the relationship between investor sentiment and leverage ratio. The empirical results showed that the interaction between investor sentiment and financial constraints was not statistically significant. This finding indicates that although investor sentiment may influence market conditions, liquidity, and financing opportunities, financially constrained and unconstrained firms do not significantly differ in the way investor sentiment affects their leverage ratio. One possible explanation is that leverage decisions are generally long-term strategic decisions influenced by structural and institutional factors such as debt capacity, collateral availability, taxation, agency costs, and financing regulations rather than short-term fluctuations in investor psychology. In emerging markets such as Iran, firms may face structural financing limitations and banking system dependencies that reduce the sensitivity of leverage decisions to temporary sentiment-driven market changes. Consequently, managers may avoid substantial leverage adjustments solely in response to optimistic or pessimistic investor sentiment because leverage changes can expose firms to refinancing risk and long-term obligations.

This finding is consistent with the traditional capital structure literature emphasizing that firms gradually move toward target leverage ratios based on economic fundamentals and adjustment costs rather than behavioral fluctuations (11, 27). The absence of a moderating role for financial constraints also aligns with the argument that leverage policy may remain relatively stable even under varying market conditions because firms attempt to preserve long-term financial flexibility. Welch argued that changes in stock prices and market valuation may mechanically affect leverage ratios without necessarily leading firms to actively rebalance capital structure (16). Similarly, Leary and Roberts emphasized the importance of debt capacity and information asymmetry in financing choices, suggesting that firms prioritize sustainable financing policies over temporary market sentiment (17). In the Iranian context, evidence provided by Salehinia and Tameradi regarding financing policies also suggests that firms' financing structures are heavily influenced by institutional conditions and financing accessibility rather than solely by market optimism or pessimism (24). Therefore, even when investor sentiment fluctuates, firms may maintain relatively stable leverage levels because financial constraints and institutional financing structures limit rapid leverage adjustments.

Another explanation for the rejection of the first hypothesis may relate to the characteristics of the Tehran Stock Exchange and the Iranian financial environment. The Iranian capital market is relatively bank-oriented, and many firms rely on traditional financing channels rather than equity issuance. Under such circumstances, investor sentiment may affect stock trading activity and valuation without fundamentally altering firms' debt financing capacity. Furthermore, financially constrained firms may lack sufficient flexibility to increase borrowing even during periods of optimistic sentiment, while unconstrained firms may already possess stable access to external financing. As a result, differences between constrained and unconstrained firms in leverage behavior may not become statistically observable. This interpretation is partially consistent with studies emphasizing the role of financing frictions and investment constraints in emerging markets (20, 21). It also supports the perspective that behavioral factors influence financial markets more strongly than long-term financing structures.

The second hypothesis investigated whether financial constraints moderate the relationship between investor sentiment and debt maturity. The findings showed that financial constraints positively and significantly affected this relationship. This result indicates that financially constrained firms are more sensitive to investor sentiment when determining the maturity structure of debt. Specifically, optimistic investor sentiment may improve financing conditions, increase lenders' confidence, and encourage firms to extend debt maturity or obtain more favorable borrowing terms. Conversely, pessimistic sentiment may increase uncertainty and refinancing risk, forcing constrained firms to rely more heavily on short-term debt obligations. Therefore, debt maturity decisions appear to be more responsive to sentiment-driven market conditions than overall leverage decisions.

This finding is theoretically consistent with the literature on debt maturity and financing flexibility. Firms facing financial constraints often encounter greater difficulty obtaining long-term financing because creditors perceive them as riskier borrowers. Under favorable market sentiment, however, investors and lenders may underestimate risk and become more willing to provide longer-term financing. In contrast, during periods of pessimism, constrained firms may lose access to long-term funding and become dependent on short-term debt. The positive moderating role of financial constraints in the present study therefore reflects the importance of market confidence and perceived financing risk in debt maturity decisions. Armanious and Zhao demonstrated that stock liquidity, financial constraints, and risk jointly influence leverage and financing behavior, especially during periods of market instability (23). Their findings support the idea that financing conditions become more sentiment-sensitive when firms experience financial constraints.

The present result is also consistent with studies emphasizing the role of asset structure and financing constraints in corporate financing patterns (19). Firms with limited financing flexibility tend to adjust debt maturity strategically in response to changing external conditions. In addition, Hall highlighted the importance of collateral and asset tangibility in debt financing decisions, showing that firms with stronger collateral structures can access more stable financing arrangements (18). Since investor sentiment influences perceived market risk and liquidity conditions, constrained firms may react more strongly to sentiment shifts when managing debt maturity. Furthermore, studies on investor sentiment and stock market behavior suggest that optimistic sentiment enhances trading activity and market confidence (5, 6). Increased confidence and liquidity may indirectly improve borrowing opportunities for constrained firms, thereby affecting their debt maturity structure.

The third hypothesis examined the moderating effect of financial constraints on the relationship between investor sentiment and the speed of leverage adjustment. The findings confirmed a positive and significant moderating effect. This result indicates that financially constrained firms exhibit stronger responsiveness to investor sentiment

when adjusting leverage toward target capital structures. In other words, favorable sentiment conditions may accelerate leverage adjustment by reducing financing frictions and improving access to capital, whereas unfavorable sentiment may slow adjustment due to increased financing costs and limited borrowing opportunities. This finding is important because it highlights that investor sentiment affects not only static financing indicators but also the dynamic process through which firms revise their capital structure.

The positive moderating effect of financial constraints on leverage adjustment speed is highly consistent with the dynamic capital structure literature. Flannery and Rangan argued that firms gradually move toward target leverage because immediate adjustment is costly and constrained by financing conditions (11). Similarly, Chang et al. demonstrated that corporate governance and external financing conditions significantly affect capital structure dynamics and adjustment behavior (12, 13). The present findings extend this literature by showing that investor sentiment and financial constraints jointly influence the adjustment process. When market sentiment is optimistic, constrained firms may perceive financing conditions as temporarily favorable and accelerate leverage adjustments to achieve target capital structures. In contrast, pessimistic sentiment may intensify financing frictions and delay adjustment. Therefore, investor sentiment acts as a market-level signal influencing the timing and speed of financing decisions.

The result also aligns with Iranian evidence regarding the determinants of capital structure adjustment speed. Esmaeilpour et al. found that the speed of capital structure adjustment differs across industries and depends on firm-specific characteristics and financing conditions (15). Nazemi Ardakani and Zarei similarly reported that governance structures affect firms' adjustment capability and financing flexibility (14). Since financially constrained firms are more dependent on external financing conditions, changes in investor sentiment may create stronger incentives for rapid adjustment when financing opportunities improve. This interpretation is further supported by behavioral finance studies indicating that sentiment significantly affects market expectations, valuation, and investor behavior (7, 8). Therefore, investor sentiment may indirectly reduce perceived financing barriers and encourage constrained firms to revise leverage more rapidly.

Another important implication of the present findings is that investor sentiment appears to influence dynamic and short-term financing decisions more strongly than long-term structural leverage choices. Debt maturity and leverage adjustment speed are relatively flexible decisions that firms can revise in response to changing financing conditions. In contrast, leverage ratio itself may remain relatively stable because it reflects long-term financing strategy and institutional constraints. This distinction explains why financial constraints significantly moderated the relationships involving debt maturity and leverage adjustment speed but not leverage ratio. Such an interpretation is compatible with behavioral finance perspectives emphasizing that sentiment-driven market conditions primarily influence timing-related financial decisions rather than deeply rooted strategic structures (1, 3). It is also consistent with studies showing that investor sentiment affects return predictability, stock liquidity, and valuation mechanisms more strongly than fundamental capital structure determinants (4, 26).

The findings of the present study contribute to the literature in several ways. First, the study integrates behavioral finance with capital structure theory by examining how investor sentiment interacts with financial constraints in shaping corporate financial decisions. Second, the study provides evidence from an emerging market context where financing frictions and behavioral factors may have stronger effects than in developed markets. Third, the study distinguishes among different dimensions of financial decision-making, including leverage ratio, debt maturity, and adjustment speed, thereby providing a more comprehensive understanding of financing behavior. Finally, the study

demonstrates that the moderating role of financial constraints is not uniform across all financing decisions, suggesting that firms react differently to sentiment depending on the nature and flexibility of the financial policy involved.

The results also have implications for investors and policymakers. Investors should recognize that sentiment-driven market optimism may encourage financially constrained firms to alter debt maturity and accelerate leverage adjustment, which may temporarily affect financial risk and firm value. Policymakers and regulators should also pay attention to the interaction between behavioral market conditions and financing constraints because excessive optimism or pessimism can alter firms' financing behavior and potentially increase financial vulnerability. Since behavioral factors influence liquidity, valuation, and financing access, stabilizing market expectations and improving financing transparency may help reduce the adverse effects of sentiment-driven financing fluctuations.

One limitation of the present study is that it focused only on companies listed on the Tehran Stock Exchange during the 2018–2024 period, which may limit the generalizability of the findings to other markets and economic environments. In addition, investor sentiment was measured primarily through trading volume changes, whereas investor sentiment is a multidimensional construct that may also be reflected through media coverage, investor surveys, social networks, and macroeconomic expectations. Another limitation relates to the use of the KZ index as the proxy for financial constraints, because alternative measures of financing constraints may produce different results. Furthermore, macroeconomic shocks, inflationary conditions, sanctions, and political uncertainty in Iran may have influenced firms' financial decisions in ways that were not fully captured by the research model.

Future research can examine the relationship between investor sentiment and financial decisions using alternative measures of sentiment such as textual analysis, social media indicators, or investor confidence indices. Researchers may also compare different industries or investigate whether firm size, ownership structure, corporate governance quality, or macroeconomic instability alter the relationship between sentiment and financing decisions. Future studies could further analyze the role of economic crises, inflation, exchange rate volatility, and monetary policy in shaping sentiment-driven financing behavior. Comparative studies between emerging and developed markets may also provide deeper insight into the institutional and behavioral determinants of corporate financing decisions.

From a practical perspective, managers should pay close attention to changes in investor sentiment because favorable market conditions may create opportunities to improve debt maturity structure and accelerate desirable capital structure adjustments. Firms experiencing financial constraints should strategically utilize optimistic market periods to secure financing under more favorable conditions and reduce refinancing risk. Investors should evaluate whether changes in firms' financing policies reflect sustainable strategic improvements or merely temporary reactions to market sentiment. Policymakers and financial regulators should also strengthen market transparency, improve information disclosure systems, and reduce financing frictions so that firms' financial decisions are based more on economic fundamentals and less on temporary emotional market fluctuations.

Acknowledgments

We would like to express our appreciation and gratitude to all those who helped us carrying out this study.

Authors' Contributions

All authors equally contributed to this study.

Declaration of Interest

The authors of this article declared no conflict of interest.

Ethical Considerations

All ethical principles were adheried in conducting and writing this article.

Transparency of Data

In accordance with the principles of transparency and open research, we declare that all data and materials used in this study are available upon request.

Funding

This research was carried out independently with personal funding and without the financial support of any governmental or private institution or organization.

References

1. Armansyah RF. Over confidence, mental accounting, and loss aversion in investment decision. Journal of Auditing, Finance, and Forensic Accounting. 2021;9(1):44-53.
2. Parsaei M, Mollanazari M. The Role of Mental Accounting in Capital Budgeting Decisions. Management Accounting. 2019;12(41):1-17.
3. Eskandari M, Mohseni A, Ghasemi M. The Effect of Behavioral Biases on Portfolio Optimization of Investors in the Tehran Stock Exchange: An Approach Based on Modern Behavioral Finance. Accounting, Finance, and Computational Intelligence. 2026:1-17.
4. Andleeb R, Hassan A. Predictive effect of investor sentiment on current and future returns in emerging equity markets. PLOS ONE. 2023;18(5):e0281523.
5. Li C. Forward looking statement, investor sentiment and stock liquidity. Heliyon. 2023;9(4):e15329.
6. Setayesh MH, Shamsoddini K. Investigating the Relationship between Investor Sentiment and Stock Prices of Companies Listed on the Tehran Stock Exchange. Advances in Accounting, Shiraz University. 2016;8(1):103-25.
7. Kiamehr A, Jenani MH, Hemmatfar M. Explaining the Role of Investor Sentiment in Capital Asset Pricing. Investment Knowledge. 2024;13(50):1-17.
8. Kim JS, Kim DH, Seo SW. Investor sentiment and return predictability of the option to stock volume ratio. Financial Management. 2016;46:767-96.
9. Kardan B, Vadiei MH, Zolfaghari Arani MH. The Role of Investors' Behavioral Tendencies, Sentiments, and Emotions in Firm Valuation. Accounting Knowledge. 2017;8(4):7-35.
10. Rezagholizadeh M, Abdi Seyedkalai M, Mohseni Kalagar Z. The Effect of Investor Sentiment on Bitcoin Returns. Asset Management and Financing. 2024;12(3):61-84.
11. Flannery MJ, Rangan KP. Partial Adjustment Toward Target Capital Structures. Journal of Financial Economics. 2006;79(3):469-506.
12. Chang Y-K, Chou RK, Huang T-H. Corporate governance and the dynamics of capital structure: New evidence. Journal of Banking & Finance. 2014;48:374-85.
13. Chang Y, Chou RK, Huang T. Corporate governance and the dynamics of capital structure: New evidence. Journal of Banking & Finance. 2015;48:374-85.

14. Nazemi Ardakani M, Zarei AH. Investigating the Effect of Corporate Governance on the Speed of Capital Structure Adjustment Using the Generalized Method of Moments. Financial Management Perspective. 2016;15:43-59.

15. Esmaeilpour P, Asgarnejad Nouri B, Zarei G, Beigi Firouzi A. A Comparative Study of Factors Affecting the Speed of Capital Structure Adjustment among Industries Listed on the Tehran Stock Exchange. Asset Management and Financing. 2023;11(1):101-20.

16. Welch I. Capital Structure and Stock Returns. Journal of Political Economy. 2004;112:106-31.

17. Leary MT, Roberts MR. The Pecking Order, Debt Capacity, and Information Asymmetry. Fuqua School of Business, Duke University, 2006.

18. Hall T. The collateral channel: Evidence on leverage and asset tangibility. Journal of Corporate Finance. 2012;18:570-83.

19. Laridasht Bayaz M, Salehi M, Sakhavatpour M. Investigating the Relationship between Financial Constraint, Asset Structure, and Financing in Companies Listed on the Tehran Stock Exchange. Asset Management and Financing. 2018;6(1):181-96.

20. Fazzari S, Hubbard RG, Petersen B. Financing Constraints and Corporate Investment. Brookings Papers on Economic Activity. 1988;1:141-95.

21. Tehrani R, Hesarzadeh R. The Effect of Cash Flows and Financing Constraints on Overinvestment and Underinvestment. Accounting Research. 2009;3:5-66.

22. Pourheidari O, Ghasemi Eghbash A. Investigating the Effect of Business Group Membership on Investment Cash Flow Sensitivity. Financial Knowledge of Securities Analysis. 2014;7(23):29-43.

23. Armanious A, Zhao R. Stock liquidity effect on leverage: The role of debt security, financial constraint, and risk around the global financial crisis and Covid-19 pandemic. International Review of Financial Analysis. 2024;92:103093.

24. Salehinia M, Tameradi A. The Effect of Political Connections on Financing Policies. Financial Accounting Research. 2019;2(40):39-60.

25. Wu C. Applications of Modern Portfolio Theory in Resource Allocation and Asset Management for Institutional Investors: A Review. Advances in Economics, Management and Political Sciences. 2025. doi: 10.54254/2754-1169/2025.bj24978.

26. Ung SN, Gebka B, Anderson RD. Is sentiment the solution to the risk-return puzzle? A cautionary note. Journal of Behavioral and Experimental Finance. 2023:100787. doi: 10.1257/jep.21.2.129.

27. Ozkan A. Determinants of Capital Structure and Adjustment to Long-run Target: Evidence from UK Company Panel Data. Journal of Business Finance & Accounting. 2001;28(1-2):175-98.