

Investor and Managerial Sentiment and Stock Returns: An Integrative Literature Review of the Evidence, Measurement Approaches, and Emerging-Market Research Agenda

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ABSTRACT

Investor sentiment is increasingly becoming a major topic of discussion and analysis within behavioral finance. It is regarded as a key driver of market growth. On the same note, management sentiment as manifested in its communications – along with its tone – convey hidden information about the overall business and market outcomes in the future, according to recent studies. The point of contention, however, is not whether investor and management sentiments, because they have, but rather, that each was studied separately. The existing studies on investor sentiments focus on markets and exchanges in terms of behaviors and beliefs. Current literature on management sentiments focuses on discourse, actual utterances, managerial biases, and communication content. Since the research on the field studies each discipline separately, the present paper attempts to connect both disciplines and review any evidence on any relationships they may have with return on investment particularly, in connection with stocks. For that purpose, the review is structured around answering four research questions: how is investor sentiment related to stock returns? Does managerial sentiment or tone contain information concerning future returns? How are the two forms of sentiment measured? Does investor sentiment change the way markets interpret managerial communication, particularly in emerging markets? The findings of the review suggest that market outcomes are connected to investor sentiment and managerial tone. Investor sentiment is a direct driver of stock market outcomes, subject to the way such sentiment has been revealed and the nature of investor, in addition to the details related to the market itself and research design. Management tone is perceived in two contrasting manners, relevant to the surrounding relations: managerial overoptimism is seen as denoting negative future outcomes which in turn require corrective measures; and effective and clear communication by management results in positive long-term outcomes. Either result is influenced by the tool of measurement for the tone or sentiment. Among the early tools were the traditional language dictionaries, before developing in more recent literature into the use of more complex and contextual language processing tools. Although more attention is given to investor and management sentiment analysis, emerging markets remain underrepresented in the literature. Egypt is a good example of this lack of representation, with limited literature on the interconnection between investor behavior and management tone. The concluding section of this review establishes an integrated conceptual framework and a research agenda for examining investor and managerial sentiments jointly in emerging markets, including the Egyptian Exchange

Keywords: investor sentiment; managerial sentiment; managerial tone; stock returns; behavioral finance; textual analysis; natural language processing; emerging markets; Egypt.

INTRODUCTION

Financial markets have historically been treated as rigid systems with prices as the main and only source of information, and with investors as rational beings with expected behaviors. Psychological elements have not traditionally been considered as factors driving pricing or other market tools. However, and with the surge of literature examining behavioral finance, rationality and predictability have been challenged. Behaviors such as overreaction, underreaction, noise trading, arbitrage constraints, overconfidence, and loss aversion are

growingly seen as key market drivers. With such departure from traditional financial studies, sentiment has been the single most extensively researched behavioral concept. Studying sentiments helps understand how beliefs and emotions affect trading demand, risk perception, valuation, and asset prices (Black, 1986; De Long et al., 1990; Barberis et al., 1998; Baker & Wurgler, 2006).

Several definitions exist for “investor sentiment”. But for the purpose of this review, this term shall be defined as either optimism or pessimism that is not supported by fundamental information. Traditionally, investor sentiment has been utilized to create surveys, market-based variables, fund flows, valuation measures, trading activity, search behavior, media content, and composite indices. The evidence is substantial, although not uniform. The results are heavily influenced by the tool and scale used to measure sentiment. Another factor influencing the results were the characteristics of the market itself and other investor (or investment) details as well as the study design, according to a recent integrative literature review (Yadav & Chakraborty, 2023; Kamath et al., 2024; Gric et al., 2023; Huynh et al., 2025).

Manager communications often carry information concerning the business and a specific topic. However, managers are not immune to biases and pressures that often influence the way they describe performance, prospects, risks, and opportunities. It is safe to say that corporate communications contain both rigid financial information and linguistic cues. Earlier studies suggest that the intention in word and tone selection by companies in their communications often influence the investor behavior to news concerning earnings. This was further supported by the recent developments in financial dictionaries and machine learning, which helped detect useful information in financial correspondence including annual reports, company communications and earnings calls (Henry, 2008; Loughran & McDonald, 2011; Davis et al., 2012; Jiang et al., 2019; Ke et al., 2020).

Although the concepts have been studied separately, they often overlap. For instance, investor sentiment can be compared to managerial sentiment in that the former reflects a market-level psychological environment, while the latter represents a firm-level communication signal. A manager’s optimistic communication is context specific as it would yield varying results depending on whether the investors are optimistic or pessimistic. In parallel, investor sentiment can influence how managerial communication is interpreted and whether it is understood as credible information, strategic persuasion, or evidence of overconfidence. Both behaviors must be deliberately studied to help understand how sentiments reflect into prices.

The distinction is of particular importance to emerging markets, which intrinsically reflect more chaotic information patterns, increased vulnerability and volatility, higher levels of participation by individual investors, and stronger reactions to political and macroeconomic shocks. Such characteristics have the tendency to augment behavioral elements and change the informational value of corporate language. Egypt provides an appropriate setting. There is existing literature studying the influence of behavior among Egyptian investors and the tone of Egyptian corporate disclosures, albeit independently (Metawa et al., 2019; Aly et al., 2018).

The purpose of this review is to integrate investor sentiment with managerial sentiment and tone instead of providing an analysis of either sentiment independently. The paper also provides an evaluation of the measurement approaches used in earlier studies of both streams; and finally attempts to identify existing evidence on their interaction. The extensive empirical literature exploring investor sentiments include an integrative literature review of 107 studies, a literature review of 108 articles covering the sentiment-return correlation, a meta-analysis of survey-based evidence, and a study of 1,274 investor sentiment publications that were included in a 2025 bibliometric/integrative literature review (Yadav & Chakraborty, 2023; Gric et al., 2023; Kamath et al., 2024; Huynh et al., 2025).

Review Questions

- RQ1. What does the literature show about the relationship between investor sentiment and stock returns?
- RQ2. What does the literature show about the relationship between managerial sentiment/tone and stock returns?

- RQ3. How have investor sentiment and managerial sentiment been measured, and how do measurement choices affect empirical conclusions?
- RQ4. What evidence exists on the interaction between investor sentiment and managerial sentiment, particularly in emerging markets and Egypt?
- RQ5. What methodological and theoretical directions should guide future research?

Contribution of the Review

The paper attempts to contribute to the growing body of literature on behavioral finance through four interconnected axes. The study suggests the placement of investor and managerial sentiments within an integral behavioral finance framework instead of the current tendency of treating them as unrelated concepts. Moreover, measurement is treated as a considerable research component that measures and compares numerous elements including survey, market, textual, dictionary, machine-learning, and contextual NLP approaches. The third contribution is that it draws a distinction between current price reactions and long-term return prospects; which proves useful in resolving the problem of contradictory findings. Finally, the review applies evidence to emerging markets, notably Egypt, while utilizing any emerging gaps to develop a research agenda for the Egyptian Exchange.

THEORETICAL FOUNDATIONS

Behavioral Asset Pricing and Noise Trading

The suggested framework is based on behavioral asset pricing models, including the Noise-Trader Theory which describes a behavior where investors engage in trading based on beliefs not founded on solid company information, while rational investors may not be able or willing to correct these price differences because arbitrage can be risky and costly (Black, 1986; De Long et al., 1990; Shleifer & Vishny, 1997). Given the above, investor sentiment can drive demand and influence prices, despite the consistent company information. Baker and Wurgler (2006) showed that sentiment has a stronger effect on stocks that are difficult to value and expensive to arbitrage.

Prospect Theory and Behavioral Biases

Prospect theory explains that people judge uncertain outcomes based on a reference point. It also shows that people usually feel the pain of a loss more strongly than the pleasure of an equal gain (Kahneman & Tversky, 1979). In financial markets, related biases include overconfidence, representativeness, availability, herding, and overreaction or underreaction. These behaviors help explain the influence of sentiment on the amount of trading and investor interpretation of information. The broader behavioral literature can be concurred from evidence from Egypt as surveys have concluded that sentiment and other behavioral factors influence investment decisions among Egyptian investors (Metawa et al., 2019).

Signaling Theory and Managerial Communication

Managerial sentiment cannot be analyzed using the same theoretical frameworks governing investor sentiment. The lack of symmetry or patterns in information delivered through management communication is a salient difference that can be studied by signaling theory. It explains how people with information use clear communication to convey information to less-informed parties.

In corporate settings, tone can therefore act as a signal about expected performance, risk, growth, or managerial beliefs. The signal is informative in nature, but it also can carry biases or can be carefully selected. When studied in the context of informational corporate communication, tone can be significant as a positive tone may contain additional information regarding future performance, but also indicate managerial optimism that investors later realize that it was exaggerated.

An Integrated Investor-Managerial Sentiment Framework

The review suggests an integrated framework with two channels, one is a market-level channel, and the other is a firm-level channel. The market-level channel will be used to measure how investor sentiment affects risk perception, trading demand, valuation, and persistent mispricing. The firm-level channel will explain how managerial beliefs and incentives affect corporate language and how it is processed by investors in the form of a signal. An interaction between both channels is possible as the market's psychology state can dictate how to interpret the same managerial signal. The integrated framework will use investor sentiment, information asymmetry, corporate characteristics, and market conditions to direct the effect of managerial tone on returns.

Channel	Main element	Transmission mechanism	Expected market outcome
Market-level	Investor sentiment	Beliefs → trading/risk appetite → demand	Price pressure, volatility, possible mispricing
Firm-level	Managerial sentiment/tone	Managerial beliefs → disclosure → investor interpretation	Information reaction or over/undervaluation
Interaction	Investor × managerial sentiment	Market mood conditions interpretation of managerial signal	Conditional return predictability
Context	Information asymmetry / limits to arbitrage	Difficult valuation increases sensitivity to sentiment	Stronger sentiment effects

Investor Sentiment and Stock Returns

Foundations and Empirical Evidence

Literature covering investor sentiments traditionally began with the hypothesis that prices can be influenced by speculative beliefs that are purely based on sentiment. Black (1986) introduced the concept of “noise traders” to describe investors who make trading decisions based on impulsive or irrational emotions and concepts instead of information. This often leads to massive risks related to mispricing (De Long et al., 1990). Trader noise also creates overreaction and underreaction of novice traders, which was studied by Barberis et al. (1998) to create a behavioral model measuring them. Meanwhile, Baker and Wurgler (2006) suggest that sentiment is a key influence on stocks that are difficult to value and expensive to arbitrate.

Investor and management sentiments were subsequently measured using direct and indirect tools. Among the studies conducted was a survey developed by Brown and Cliff (2004) to measure investor sentiment and its effect on the estimation of assets. In 2006 through 2007, Baker and Wurgler created combined approaches based on regular multiple market indicators. Their approach gained popularity afterwards. An indirect measurement involved gauging pessimism in media was developed by Tetlock (2007) to understand market pressures and changes to pricing. Another indirect measurement was developed by Da et al. (2015) by using search-based measures to capture investor attention and sentiment. The abovementioned studies combined demonstrate evidence of the influence of sentiment on prices, and confirm that the measurement tool used to capture the sentiment drives the interpretation of the results

Contemporary literature establishes a firm connection between sentiment and prices but disagrees on the manner. Studies were conducted in the form of reviews of more recent literature, including Yadav and Chakraborty (2023) who reviewed 107 studies. They detected massive contradiction in findings and found very little evidence on the topic from developing economies. In 2024, Kamath et al. reviewed 108 articles that were indexed by Scopus to decide that there exists a relationship between investor sentiment and investment returns over a short period of time. Sentiments were triggered by social media, fund discounts and trading volumes. Another form of literature review involved a meta-analysis of survey-based measures, as conducted by Gric et al. (2023). They found that information regarding the trading was exaggerated, and

that the particular influence was conditional on other factors such as the study design, the market characteristics and the nature of the investor. In a larger-scale study of literature that was published between 1991 and 2023, Huynh et al. (2025) studied 1274 publications. Their findings resolved that the key drivers of investor sentiment were asset returns, financial risks as well as inconsistencies within the market.

Measurement of Investor Sentiment

No universal single investor sentiment measure exists at the present time. However, surveys can be used to directly ask investors about their expectations, notwithstanding their shortfalls of response bias, limited frequency, and sample restrictions. Additional more popular measures include market-based representations such as trading volume, volatility, turnover, fund flows, and valuation ratios; but their results can also include fundamentals and liquidity conditions, in addition to sentiment. Although search and social-media measures can capture public attention and mood they may fall short against distinguishing them from information. Composite indices are used to reduce dependence on any single representation, but their construction introduces choices concerning variable selection, weighting, standardization, and extraction of the common component.

The use of multiple measurement tools is crucial to measure different psychological or economic phenomena such as cases in which two studies use different sentiment representations. The high trading volume can be an indication of disagreement or information arrival, rather than a representation of optimism, and the high volatility can create feelings of uncertainty in addition to fear. A topic receiving extensive search by potential traders, although indicates attention, does not show where such attention is directed.

Measure family	Typical representations	Main advantage	Main limitation
Survey	Investor/consumer confidence	Direct psychological measure	Frequency and response bias
Market-based	Volume, turnover, volatility, fund flows	High-frequency and observable	May capture fundamentals/liquidity
Valuation-based	Closed-end fund discount, speculative ratios	Links sentiment to pricing	Model and interpretation dependence
Attention/search	Google Trends, search intensity	Timely alternative data	Attention is not identical to sentiment
Media/social	News tone, social-media mood	Captures public discourse	Bot/noise, selection and language issues
Composite	Several standardized representations	Reduces single-representation dependence	Construction and weighting choices

Short-Run Effects Versus Long-Run Predictability

For comparability, this review uses the following practical horizon labels: short run refers to intraday through one month after the sentiment or disclosure measure; medium run refers to more than one month through twelve months; and long run refers to horizons longer than twelve months. These cutoffs are analytical conventions rather than universal standards. They are useful because event studies and daily sentiment measures primarily capture immediate repricing, whereas aggregate manager-sentiment studies and annual-report tone can be evaluated over quarterly or annual horizons. The Egyptian evidence provides a concrete long-horizon example: Abdelaal (2025) reports associations between narrative tone and subsequent performance after one and two years.

Operationalizing Short-, Medium-, and Long-Run Effects

Conflicting findings are caused by the different effects of sentiment on different time intervals. On the short term, sentiment can increase demand and prices and therefore create a powerful causal relationship between sentiment and its subsequent returns. However, and in the long term, overvaluation is a possible consequence of unrealistic optimism, which may ultimately lead to corrections, and therefore a negative predictive relationship. Any literature analysis should highlight the distinction between the concurrent reaction and forecasts of future returns.

Managerial Sentiment and Managerial Tone

From Narrative Disclosure to Measurable Tone

Annual reports, regulatory filings, MD&A sections in financial reports, earnings releases, conference calls, CEO and chairman statements, and other corporate correspondence in the form of narrative disclosures are all communication tools used by managers to relay their information. Traditional accounting may fail to interpret or summarize such texts and their contained information. Henry (2008) studied the linguistic tone of earnings announcements and found that such tone is a direct driver of market reactions. Within the same context of tone, but with regards to management, Davis et al. (2012) found a direct causation between the managerial tone in communications concerning earnings and the subsequent responses of investors. To achieve an accurate description of the linguistic tones contained within communications and narratives, Loughran and McDonald (2011) recommended a financial terms dictionary instead of generic language dictionaries to avoid potential misclassification of financially neutral words as negative by global sentiment dictionaries.

Managerial tone has been extensively studied across a growing number of literatures, such as the study conducted by Jiang et al. (2019) that created an aggregate manager sentiment index from corporate disclosures. During the process, they noted the negative correlation between high manager sentiment and lower future aggregate stock returns. Their corpus also provided information that contributed to the literature to investor sentiment. Their index and the ensuing results and their interpretation concurs the phenomenon of over-optimistic managers near or during market peaks, and their negative emotions when such overoptimism yields negative results that require subsequent corrections. Conversely, positive correlations between managerial optimism and returns have also been captured, notably with tone which has the power of conveying solid information and driving improvements. The appropriate interpretation therefore depends on whether tone is treated primarily as information, bias, persuasion, or a combination.

Measurement Approaches

Dictionaries are the most commonly used measurement tools. They offer neutral lexicon that can be used in measurement approaches, which can later help replicate the study or measure. Loughran-McDonald financial dictionary is a popular choice by researchers. However, warning is due to researchers because although dictionaries are neutral, their neutrality strips diction from context. Dictionaries fail to understand negation, sarcasm, or jargon that is specific to a certain discipline, for example. Machine learning methods have since been suggested as an appropriate alternative, to measure sentiment in a supervised environment (Ke et al., 2020). They also recommended contextual language models, such as BERT, for their ability to detect semantic relationships which are often undetected by wordlists or lexicons. All those tools are powerful, but they only work separately and will not be useful when attempting to create a more complex model. They also require additional resources for data training and interpretation.

Existing literature on managerial sentiment suggest that the topic be treated within a composite model rather than a single standardized variable. The use of multiple measures is then recommended for future studies, including the use of a dictionary in conjunction with a contextual natural language processing (NLP) score. Such composite measurement tool will be beneficial in emerging markets, because they are characterized by norms distinct from the US-based datasets that dominate the literature. The mixed method will resolve issues

relating to translation problems, decorum concerning disclosures and the availability of necessary documentation.

Investor Sentiment and Managerial Sentiment: The Interaction

Why Interaction Matters

The central argument of this review is the substantial importance of establishing a model that measures both the investor and the managerial sentiments as complementary not independent variables. Within that context, investor sentiment can be defined as the existing psychological state of the market, whereas managerial tone is usually defined as the signal that enters that psychological state, which must be new and at the firm level. Moreover, a single management communication can have different interpretations with the differing stages and states of the market and general attitude. At times when the market attitude is optimistic, managerial communication can be perceived as reinforcing expectations and creating immediate responses to prices. Similarly, but during pessimistic times, the same managerial communication may be perceived as containing promotional language or a failed attempt to mitigate negative results or expectations.

The description of sentiment in existing literature does not provide a single standardized definition; it is more suggestive than comprehensive. Managerial sentiment is described as providing complementary information to the current measurement approaches to investor sentiment measures (Jiang et al., 2019). In the meantime, managerial tone does not exist in vacuum as it may induce uncertainty and aggravate valuation issues, especially during volatile market conditions. Despite such gaps, there exists no framework that models investor sentiment at the market level to act as a moderator of managerial tone and sentiment at the firm level. This paper attempts to address such explicit gap.

Information Versus Sentiment

Three mechanisms may explain the interaction between investor and managerial sentiment. First, signal interpretation suggests that investor sentiment affects how managerial disclosures are perceived. An optimistic statement may be viewed differently in a pessimistic market than in an optimistic one. Second, sentiment amplification suggests that market sentiment can strengthen the price response to firm-level information. Third, strategic disclosure allows managerial tone to respond to prevailing market conditions, creating a potential feedback effect. Jiang et al. (2019) show that manager sentiment contains information that is complementary to investor sentiment, while Baker and Wurgler (2006) find stronger sentiment effects for firms that are difficult to value and costly to arbitrage. These findings support examining the interaction between the two forms of sentiment rather than treating their effects as purely additive.

Empirical Pathways Suggested By the Literature

The strongest direct example is Jiang et al. (2019), who find that aggregate manager sentiment negatively predicts future aggregate market returns and adds information beyond existing investor-sentiment measures. This does not by itself establish that investor sentiment moderates managerial tone, but it demonstrates that the two constructs contain overlapping yet non-identical information. A second pathway follows from Baker and Wurgler (2006): because sentiment effects are concentrated in difficult-to-value and costly-to-arbitrage stocks, the effect of a managerial signal should plausibly be larger when the market is already sentiment-sensitive. A third pathway is suggested by Tetlock (2007), where media pessimism predicts downward price pressure followed by reversion. This indicates that public mood can affect the same interpretive environment in which managerial disclosures are received.

The utilization of two mechanisms at the same time is possible; as with information as a mechanism, managerial sentiment denotes crucial information on cash flows, risks, and operating conditions. However, when such sentiment is magnified by a sentiment-amplification mechanism, this same information will vary in weight depending on investor mood changes. The third mechanism is the strategic or biased communication that describes managers who become more optimistic when market sentiment is high, which later reverses. To understand these mechanisms clearly, researchers need models that account for basic

financial factors, use sentiment measures from the appropriate earlier periods, and consider the possibility that the relationship works in both directions.

What the Evidence Does and Does Not Establish

Media sentiment should be treated as a third channel rather than as a synonym for investor sentiment. Media content can shape investor attention and beliefs, but it can also reflect information arriving from firms and markets. Tetlock (2007) shows that unusually pessimistic media language is associated with downward price pressure and subsequent reversion, while recent evidence comparing news and social-media sentiment indicates that their relative importance can differ across markets. This creates a three-way setting: managers produce firm-specific language, media outlets repackage or interpret information, and investors respond within a prevailing market mood. The implication for the integrated framework is that media sentiment may mediate the transmission of managerial tone to investors, confound the observed investor-sentiment effect, or amplify both channels. Future empirical work should therefore estimate models with media sentiment as a control, mediator, or competing moderator rather than treating investor sentiment as the only market-level conditioning variable. Nyakurukwa and Seetharam (2025) further show how causal mediation analysis can be used to separate the influence of social-media and traditional-news sentiment, illustrating a useful methodological direction for future work.

Media Sentiment as A Third Channel

Three cautious conclusions can be made based on the existing evidence. The first conclusion is the establishment that investor sentiment as well as the managerial tone contain information suggestive and driver of market outcomes. The second conclusion is the relationship between both sentiments, of whichever nature, is not uniform, but rather conditional upon temporal constraints and measurement tools. Finally, The amount of research covering the interaction between the two sentiments is negligible compared to similar research on either sentiment individually. The research opportunity is to move from attempting to acknowledge that sentiment matters into identifying the instances of changes driven by one sentiment onto the other.

Literature Identification and Evidence Synthesis Approach

Review Design

The paper is a literature review of an integrative design. It attempts to combine studies on investor and managerial sentiments, which have historically been studied separately. This review captures the development of both concepts and the attempted composite approach. It also compares the measurement approaches for both concepts and identifies key gaps in existing research covering the topics. As stated above, this is an integrative literature review and carries no claim that it is a registered systematic review nor that it conducted a thorough database screening.

Literature Identification Strategy

Four publicly accessible source groups were used: Google Scholar for scholarly discovery, Crossref for bibliographic verification, publisher and journal platforms including ScienceDirect, Wiley, Emerald, and Taylor & Francis for article-level verification, and institutional repositories for openly available studies. Searches were conducted iteratively through September 2026, with a core publication window of 2004–2026. Earlier foundational studies were retained where necessary to establish the theoretical development of investor sentiment, behavioral asset pricing, signaling, and textual analysis.

The literature was identified through targeted keyword searches and backward and forward citation chaining. Key terms included investor sentiment, managerial sentiment, managerial tone, textual analysis, stock returns, asset pricing, emerging markets, and Egypt. Both studies directly examine investor and managerial sentiment and the two separate literatures were considered, given the limited number of studies addressing their interaction.

Studies were included when they were substantive academic works addressing investor sentiment, managerial tone, or their interaction with stock returns, prices, valuation, market reactions, or related financial outcomes. Theoretical, empirical, review, meta-analytic, and bibliometric studies were also considered where they contributed directly to the review questions. Studies with insufficient relevance, duplicate publications, or inadequate bibliographic information were excluded.

Core Search Concepts Used to Identify the Literature:

("investor sentiment" OR "market sentiment" OR "investor mood" OR "market mood")
AND
("managerial sentiment" OR "manager sentiment" OR "managerial tone" OR "manager tone" OR "CEO tone" OR "management tone" OR "corporate disclosure tone")
AND
("stock return*" OR "stock price*" OR "equity return*" OR "asset pricing" OR "market return*" OR "firm value")

Existing literature on the relationship between investor and managerial sentiments is scarce, therefore, the review used two corresponding concepts. The first involved the studies explicitly connecting investor sentiment and managerial sentiment or tone. The second covered separate literatures on investor sentiment and managerial tone that were then connected using citation chaining. Such approach helped reduce risks of missing relevant studies that use different terminology for the same underlying concepts.

Selection Principles

- Include peer-reviewed and other substantive journal articles and academic studies on investor sentiment and/or managerial sentiment or managerial tone. Include studies on interaction between investor sentiment and/or managerial sentiment or managerial tone within the context of stock returns, stock prices, asset pricing, market reactions, or firm valuation
- Include empirical, theoretical, review, meta-analytic, and bibliometric studies where they make substantive contribution to addressing the review questions.
- Include studies from developed and emerging markets to facilitate assessment of geographic differences.
- Exclude studies unrelated to financial market outcomes, studies where sentiment is secondary, duplicate publications, consist of non-scholarly commentary, and papers with insufficient details to confirm the target relationship.
- Explicitly document language restrictions in the final review.

Evidence Extraction

For the literature collected for this review, each study must include labels specifying the author and/or year, market and/or market, study interval, unit of measurement and analysis, methodology of measurement and analysis, nature of sentiment study, text source (if applicable), dependent variable, analytical methods, key findings, relationship direction, and limitations. Finally, a separate field must identify whether the study examined investor and managerial sentiments jointly or individually

Synthesis Approach

It is recommended that findings are summarized by themes and overall patterns instead of combining all results in a single statistical estimate. The reason for this recommendation is that the existing studies have used different measures, samples, time periods, and outcomes. Meta analyses are typically used when studies are sufficiently comparable, including studies that use two similar sets for measurement, one for sentiment and the other for returns. Gric et al. (2023) recommended the careful inclusion of study design and measurement methods when combining study results.

RESULTS AND SYNTHESIS OF THE LITERATURE

Development of the Investor Sentiment Literature

Existing research has evolved from noise trading theories to more advanced and elaborate investor sentiment measuring and prediction detection tools. While earlier studies suggested the existence of beliefs not based on company information have the potential to influence stock prices, recent studies have expanded in research methodology to find that sentiment effect on stocks is far stronger than what was believed in a manner that is difficult to evaluate and costly to arbitrage. More recent research uses search behavior, media content, social media, and machine learning to measure sentiment. Huynh et al. (2025) extensively studied 1,274 publications covering investor sentiments that were published between 1991 and 2023 to provide evidence on the magnitude of growth witnessed by such field. Major research areas studied include asset returns, financial risk, and market asymmetry.

Overall Direction of Investor Sentiment Effects

The paper does not support a standardized unconditional coefficient associating sentiment with returns. Among the traditionally detected patterns are positive short-term correlation and negative long-term predictability. Such idea is economically viable in a very simple pattern summarized in the following statement “optimistic sentiment can temporarily increase demand and valuations, while subsequent correction produces lower returns”. The meta-analysis of survey-based evidence suggests that their influence is not insignificant and that estimates vary by market, investor type, and research design. The argument can be concluded in the idea that sentiment is crucial with effects that are contingently context-specific and time-dependent.

Managerial Sentiment: A More Heterogeneous Evidence Base

Existing literature covering managerial tone is more limited and more non-uniform. Jiang et al. (2019) found a negative correlation between aggregate manager sentiments and future returns predictions. However, the measure adds information extending beyond investor sentiment. Starting at the corporate level, studies suggest that tone is associated with liquidity, market reaction, firm value, and future operating performance. Literature from 2024 reveal the existence of the positive influence of management optimism on stock returns. This shows that managerial sentiment is sufficiently flexible to engage in information and work channels and overvaluation and correction

A structural review of 163 studies on managerial tone is proof that the literature on the topic no longer asks the question of “does tone matter?” but start with it as a fact. Instead, studies have been examining the role of tone in delivering information or predicting changes. Other studies on a smaller level examined persuasion, manipulation, and consequences. One of the gaps, however, is that the literature remains concentrated in the US and relies heavily on SEC filings, conference calls, press releases, and annual reports. Such gap mandated developing more studies on tone and sentiments on emerging markets.

Measurement as A Source Of Disagreement

Literatures covering either or both sentiments, disagreement was almost universal in measurement differences. Dictionaries were commonly accepted as neutral and objective but carried the risk of word misclassification. A similar paradox is also evident in market representations, which can demonstrate flexibility and fluidity, but also rigid information and facts. Meanwhile, the tool of surveys is reliable and commonly applied in research; it, however, is difficult to recreate at required frequencies. While social media can be used as a measure in sufficient frequencies, it will possibly produce noise and sentiment rather than reliable information. Machine-learning measures, such as natural language processing (NLP), may be predictive but not easily interpretable. Loughran and McDonald (2011) and Ke et al. (2020) established their own measurement approaches, with the former focused on domain-specific (finance) language and the latter focused on NLP optimization to predict returns. These approaches should therefore be viewed as complementary rather than as interchangeable measures of one construct.

Developed Versus Emerging Markets

The reviewed literature focuses on data collected from markets in developed countries. Such specificity creates explicit gaps demonstrated in minimal research on developing countries or emerging markets (Yadav and Chakraborty, 2023). Within the same context, existing research on managerial tone almost exclusively covers the United States, with little or negligent studies on other markets. Such lack of geographic representation creates imbalances, which undermine potential efforts to present unbiased findings on information environments, investor composition, disclosure quality, liquidity, and institutional protections. Any variations have the power to change how sentiment influences prices. Findings from the US are not representative of emerging or other developing markets.

Evidence From Egypt

The Egyptian evidence should nevertheless be interpreted cautiously. Metawa et al. (2019) use a questionnaire of 384 investors and examine behavioral factors and investment decisions; this is evidence of investor behavior, but it is not a direct test of sentiment on realized stock returns. Heshmat and Abdallah (2019) provide a more direct asset-pricing application around crisis periods, but the crisis-focused design limits generalization to normal market conditions. On the managerial side, Aly et al. (2018) analyze 105 listed Egyptian firms over 2011–2013 and find evidence that financial performance helps determine disclosure tone, making reverse causality particularly important. Abdelaal (2025) extends the Egyptian tone evidence to 79 firms over 2010–2018 and reports positive associations with performance at one- and two-year horizons. Taken together, the Egyptian literature is useful but fragmented across constructs, samples, periods, and dependent variables. It does not yet provide a direct joint test of market-level investor sentiment × firm-level managerial tone on stock returns.

Investor sentiment and managerial tone have both been covered in studies on behavioral finance in Egypt. In a survey conducted by Metawa et al. (2019) that covered 384 investors, investment decisions were found to be substantially influenced by sentiments such as overconfidence, overreaction and underreaction, as well as herding. Another study was conducted on investor sentiment during major crises and established the significant role of sentiment in the pricing of assets (Heshmat and Abdallah, 2019). Efforts to study and analyze the role of investor sentiment in the markets continue in Egypt.

This finding is particularly important because it highlights an identification problem: tone and performance are jointly related, and the study reports evidence that financial performance helps determine tone. The result therefore cautions against interpreting tone–performance associations as evidence of a one-way causal effect from tone to performance.

Evidence collected from literature on Egypt has established a distinction in study focus. Literature covering investors often concentrated on behavioral biases and investment decisions, with associations with market outcomes. Meanwhile, studies on narratives and correspondence (disclosures) examined management language and tone with associations with accounting and valuation outcomes. The Egyptian market requires further studies that integrate investor sentiments at the market level and management tone at the company level.

Comparative Evidence Matrix

Literature Stream	Typical Measure	Typical Horizon	Broad Evidence	Main Issue	Unresolved
Investor sentiment	Surveys, market representations, composite indices	Short to long run	Sentiment affects pricing and/or predictability	Representation validity and causal direction	
Media sentiment	News tone / pessimism	Daily to monthly	Mood can predict trading and price	Information sentiment	vs

			pressure	
Managerial tone	Financial dictionaries / NLP	Event to annual	Tone contains market and performance information	Information vs bias/persuasion
Managerial sentiment	Aggregate disclosure tone	Monthly to annual	Can predict future returns, sometimes negatively	Why sign differs across settings
Emerging markets	Mixed	Mixed	Evidence exists but is thinner	External validity and data availability
Investor manager x	Joint measures	Mixed	Limited direct evidence	Interaction mechanism largely unresolved

DISCUSSION

Why Findings Differ Across Studies

The studied literature produced different findings, and this is attributed to four factors; the construct and how it is defined, the timeframe of the effect, the market characteristics and sentiment identification strategy. Different sentiment metrics will capture different sentiment aspects. For example, one study may measure investor optimism from surveys, while another measures sentiment from financial news or social media. Study interval is also important. A positive immediate return response does not necessarily reflect positive results in the future. Market factors must also be considered. The relationship may be demonstrated differently across markets and firms due to the varying limits to arbitrage and information asymmetry. Finally, tone and language can act as both predictive and causative of market and pricing performance levels. Future research should account for these differences directly in their design and statistical models instead of assuming that variations in results are simply random error or unexplained statistical variation.

Investor Sentiment as a Conditioning Environment

The integrative review suggests treating investor sentiment as a conditioning environment, in addition to its role as an indicator of future results. Markets with high expectations and risk preferences attract management disclosures that are specific to corporate. Sentiment here has a dual effect – a positive influence in environments with high optimism among investors and poor effects where investors are skeptical and dismissive of optimistic language. Studies will have to answer which sentiment prevails.

Managerial Tone as Information and Bias Simultaneously

The central identification problem is that tone may be endogenous to the same fundamentals that later explain returns or performance. A profitable firm may use more positive language because performance is already strong; investors may also react to fundamentals that simultaneously affect tone and returns. Omitted variables such as industry shocks, macroeconomic news, firm size, liquidity, volatility, analyst expectations, and corporate events can create spurious associations. Reverse causality is not merely theoretical: the Egyptian evidence of Aly et al. (2018) indicates that financial performance helps determine tone. Consequently, a positive tone–return coefficient should not automatically be interpreted as evidence that managerial sentiment causes returns.

More credible designs should use lagged sentiment measures, rich firm- and time-level controls, firm and time fixed effects, placebo tests, crisis/non-crisis comparisons, and alternative tone measures. Where credible instruments or quasi-exogenous shocks exist, instrumental-variable, difference-in-differences, or generalized-method-of-moments approaches may be considered. These methods do not solve endogeneity automatically; their validity depends on the assumptions and instruments used.

Causality and Endogeneity

Managerial tone can both be informative and denoting bias. A dichotomous framework in which either effect is considered is futile. A good example of this argument is the information content as opposed to the communication means. Managers can possess crucial information but deliver it through improper tone, which skews the results. Managers can also perfectly express their optimistic, strategic, or defensive sentiment through the proper linguistic channels. A recommended study design should separate the tone from the information content (fundamentals) and test the tone to establish whether it predicts earnings, forecasts and returns. In such case, the results will be conditional on the tone; if the tone and fundamentals are in the same direction, then a more reliable interpretation of information will be guaranteed. If the tone predicts reversals and corrections at a later stage, interpretation will see that the sentiment of overoptimism was the culprit that dictated the decisions.

Implications for Emerging Markets

The integrated perspective also has practical implications. Managers and investor-relations teams should recognize that the market response to a disclosure is not determined solely by the wording of the message. The prevailing investor mood, information asymmetry, media coverage, and firm-specific credibility can change how identical language is received. In optimistic markets, highly positive language may reinforce expectations but may also increase the risk of later disappointment if fundamentals do not support it. In pessimistic markets, a measured and evidence-linked tone may be interpreted as more credible than promotional language. For investors and analysts, the implication is that managerial tone should be read jointly with fundamentals and market sentiment rather than treated as a standalone predictor. For regulators, standardized disclosure formats and clearer narrative reporting can improve the comparability of textual measures across firms and time.

Practical Implications for Corporate Communication and Investor Relations

Emerging exchange markets create the perfect environment to test the integrative framework. Contradictory and asymmetrical information will drive investors to rely more on corporate disclosures instead of noise. Conversely, the excessive participation of retail investors will exasperate the reliance on sentiment and noise. Factors such as reporting design must be accounted for when performing a study. The lack of reporting standards and uniform document formats add more challenges to measurements. Future research in this field will help bridge gaps in underrepresented markets and will be able to test how far established relationships in developed markets can be reflected in other regions.

Future Research Agenda: An Integrated Egyptian-Exchange Framework

The original motivation to perform this review was to establish a foundation for future research design. The proposed study should exclusively be performed on Egyptian Exchange firms to analyze investor sentiment at the market level and management sentiment at the company level. The proposed study will also test the effect of both sentiments on stock returns in the future. It is also recommended that the study design be treated as a suggestive extension of this review and not as established evidence.

Investor Sentiment Index

The proposed investor sentiment index is an integrated measurement approach. It should combine standardized measures of trading activity, volatility, consumer confidence, and public search attention. However, special caution must be given to how each representation is reflected economically. Alternative specifications should be estimated by using sub-categories of representations to test index resilience and comprehensiveness. Potential components of these subsets include trading volume, volatility, Google Trends, and consumer confidence.

Managerial Sentiment Index

The proposed managerial sentiment index should be designed by aggregating annual reports, MD&A sections, earnings calls, CEO or chairman statements, and other official corporate disclosures. Where applicable, a combined paradigm developed from dictionary-based score generated on the Loughran-McDonald financial lexicon and a contextual NLP measure. The uniform methodological approach should be the reporting of each measure individually and then constructing the combined score. This separating of scoring will allow for deciding whether conclusions are driven by the dictionary or by the contextual model.

Empirical Specification

A future empirical test should estimate future stock returns as a function of lagged investor sentiment, lagged managerial tone, their interaction, and a vector of firm and market controls. A baseline panel specification can be written conceptually as:

$$\text{Return}(i,t+h) = \alpha + \beta_1 \text{InvestorSentiment}(t) + \beta_2 \text{ManagerialTone}(i,t) + \beta_3 [\text{InvestorSentiment}(t) \times \text{ManagerialTone}(i,t)] + \gamma \text{Controls}(i,t) + \text{FirmFE}(i) + \text{TimeFE}(t) + \varepsilon(i,t).$$

The coefficient β_3 is the key interaction parameter: a statistically and economically meaningful estimate would indicate that the effect of managerial tone changes with the prevailing investor-sentiment environment. Alternative specifications should include regime-switching models to distinguish high- and low-sentiment states, nonlinear terms where theory suggests threshold effects, and crisis versus non-crisis subsamples. Robustness should vary the sentiment construction, forecast horizon, disclosure source, and return definition.

A basic panel-data model can examine whether current investor sentiment, managerial sentiment, and their interaction help explain future stock returns at the company level. At the same time, it will account for other factors relating to company and the macroeconomics. Fixed effects relevant to the firm can encompass company characteristics that do not change over time. Effects fixed by time can account for market-wide shocks that affect all firms. If endogeneity is proven to exist within variables, more advanced methods such as instrumental variables or GMM can be used. Robustness checks should test whether the results remain similar when using different sentiment measures, different time scales, crisis versus non-crisis periods, and periods before and after major structural changes in the Egyptian market.

Key Hypotheses for Future Empirical Testing

- H1: Market-level investor sentiment predicts firm-level stock returns on the Egyptian Exchange, with the effect varying by horizon.
- H2: Managerial disclosure tone provides incremental validity for stock returns beyond standard financial fundamentals.
- H3: The relationship between managerial tone and stock returns depends on prevailing market-level investor sentiment.
- H4: Sentiment effects are stronger in firms with higher information asymmetry, valuation uncertainty, or arbitrage challenges.
- H5: The interaction between sentiment channels differs between crisis and non-crisis periods in Egypt.

CONCLUSION

Sentiment has been established as a key driver and connector between behavioral finance and asset pricing. Existing literature, however, failed to study the two types of sentiment driving such changes: investor sentiment and managerial tone collectively. research on investor sentiment has shown that this construct has substantial influence on the market noise, trading behavior, pricing, and return predictability. Literature on managerial sentiment focused on corporate language, information asymmetry, managerial bias, and the influence of disclosure tone on markets. The conclusion is that both the psychological and linguistic signals

are essential, however, the mechanism for their influence on market sentiment and corporate communications is not explained.

The review explains the reasons for the lack of a standardized universal interpretation of the sentiment-return paradigm. The reasons can be attributed to different measures, time scales, and markets. It is, however, difficult to understand the distinction between mispricing caused by information and as caused by sentiment. Among the neutral and transparent measures used are dictionaries, although rigid, with supervised and contextual NLP approaches establishing more accurate interpretations. The evidence from emerging markets, and particularly Egypt, remains comparatively limited and fragmented

The direction with most potential is an integrated framework in which investor sentiment represents the market environment and managerial sentiment represents a firm-specific signal. The interaction between them provides a mechanism that can explain why identical managerial disclosures may generate different market responses under different sentiment conditions. For Egypt, the literature already provides evidence that investor behavior and corporate disclosure tone matter independently. What remains largely unresolved is whether, and under what conditions, these two channels support or cancel one another. Addressing that question would provide a meaningful contribution to behavioral finance, textual analysis, and asset pricing for emerging markets. The review is based on literature reviews on investor sentiment and managerial tone, which support the need for an integrated rather than duplicative review.

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