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## Information Asymmetry and Analyst Forecast in Market-Wide Investor Sentiment

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**Abstract:** *This study investigates the role of market-wide investor sentiment on the level of information asymmetry and analyst forecast error. The role of market-wide investor sentiments in the valuation and forecasts by analysts is still uncertain. In addition to this, the role of market-wide investor sentiment in influencing information asymmetry between the market participants is a pertinent question. This study attempts to close this gap by answering the impact of market-wide investor sentiment on information asymmetry and analyst forecasting dispersion. The study utilized the data of public listed firms in the USA and employed multiple regression fixed effect model to estimate the results. The results concluded that investor sentiment increases the information asymmetry and analyst forecast errors. That confirms that optimistic investor sentiment brings in the noise of trading and unsophisticated trading mechanism in the stock market, thereby questioning the classical theory of finance, which only relies on the fundamental analysis. The study provides important insights for the investors and analysts to incorporate behaviors and sentiments while undertaking valuation and trading decisions.*

**Key Words:** Analyst Forecast, Information Asymmetry, Investor Sentiment

**JEL Classification:** E32.

### Introduction

The efficient markets hypothesis, which asserts that market prices rationally and instantly incorporate all available information, has been one of the most prominent ideas of the previous three decades (Lo, 2004). According to the burgeoning field of behavioral finance and economics, markets are not driven by rationality but by fear and greed, which causes the stock market. Recent advances in behavioral finance, which dispute the rationality of standard financial theory

assumptions, have refuted earlier theories about how people make investment decisions.

It appears that rational actors have played a minor role in boosting asset value to the current cash flow value in previous decades ([Baker & Wurgler, 2007](#)). Concerning this specific situation, asset pricing also incorporates risk-related expected rates of return and investor expectations affecting the returns. Behavioral finance relates to the investor's behavior and the investment relationship ([Baker & Nofsinger, 2002](#)). Investor behavior is visible in stock prices, and

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investor psychology influences market swings. Markets tend to be bullish or bearish when investors speculate on costs rather than determining whether or not a particular investment thesis is correct on the fundamentals.

Numerous studies have shown that reports about analysts play a critical role in disseminating data. Market players can benefit from experts' advice and recommendations based on market research assessments ([Berkman & Yang, 2019](#); [Howe et al., 2009](#); [Kecskés et al., 2017](#)). According to [Frankel and Li \(2004\)](#), regular and active reporting of such outcomes may assist lessen knowledge asymmetry between investors and firm management. Analyst reports can serve two purposes for investors: predicting the company's earnings and share price and providing specific investment advice for certain firms. The stock market's dynamics are significantly influenced by expert opinion.

The stock market's dynamics are greatly affected by changes in analyst recommendations. Analysis of analyst reports by Loh and Stulz (2011) shows that the best or most experienced analysts had a more significant impact on stock returns than less experienced analysts. According to [Green et al. \(2014\)](#), changes in analyst recommendations are immediately reflected in the spot price when new information is released. It's easier for analysts to influence stock prices when accessing a company's financial information. Behavioral finance studies examine the influence of investor sentiment on the stock market dynamics and analyst recommendations based on past research. When sentiment is high, changes in analyst recommendations have a more significant impact on stock performance (Loh, 2010). As demonstrated by Kim et al. (2019), the sentiment impact causes higher reactions in the stock return dynamics of particular firms when analyst recommendations are downgraded than when they are upgraded.

This paper aims to measure the extent of investor sentiment to mitigate the problem of information asymmetry and to check the impact of market-wide investor sentiment in

influencing analyst forecasts and valuation. One of the ways that investor emotion influences analysts' projections are by impacting their ability to produce private information. The results also indicate that sentiments and behaviors affect the stock market trading activities and analyst recommendations.

This paper has six parts: 1. The introduction deals with an overview of the topic. 2. Literature Review provides a brief overview of the previous research. 3. Hypothesis development deals with developing a hypothesis based on previous studies. 4. Methodology deals with the choice of analytical techniques employed in this research. 5. Empirical Analysis deals with interpreting results and diagnostics of data. 6. The conclusion deals with the final comments on the results.

## Literature Review

### Information Asymmetry

Market efficiency and information asymmetry research have gained popularity in finance, corporate governance, and accounting. [Akerlof \(1978\)](#) described informal promises and asymmetric information marking the lemon market. [Akerlof \(1978\)](#) used an economic model to analyze asymmetric information in the operated vehicle business in the United States. Adverse selection has been observed by using this model in numerous markets in the United States. Usategui (2000) studied this practice between businesses and banks and found that even if a company can fund a project, it will seek a lower interest rate from a risk-averse bank.

Harris and Raviv (1991) released an influential essay that synthesized research on agency costs and asymmetric information. According to [Rabelo and Vasconcelos \(2002\)](#) and [Pargendler \(2011\)](#), ownership is too concentrated, with pyramidal arrangements bolstering the authority of dominant shareholders while failing to recognize the importance of minority shareholders as business partners. The capital structure and debt levels are also affected by information

asymmetry ([Botosan, 1997](#); [Modigliani & Miller, 1958](#); [Myers & Majluf, 1984](#); Ross, 1977). Harris and Raviv (1991) discovered that internally generated information is always better than externally generated information preventing stock price reactions. On the other hand, corporations go public to raise cash, which can negatively affect stock prices since investors may infer that the company's internal resources and risk-free loans are insufficient or unavailable, necessitating greater yields from investors. Furthermore, debt issuance acts as a signal for asymmetric data transmission.

### Analysts' Forecasts

Analyst forecast is a prominent topic in the finance literature, as the accuracy of financial analysts' forecasts is critical to their professional success and survival. In a world where knowledge is scarce and not evenly disseminated, financial analysts are expected to be much more knowledgeable than the general population. Analyst estimates accurately represent logical expectations and test hypotheses connected to the forecast's accuracy ([Batchelor & Dua, 1991](#)).

For years, scholars have been curious about how the quality of analyst forecasts affects price formation and analyst career advancement. An analyst's ability to predict the future depends heavily on their accuracy (Gu & Wu, 2003). More accurate analysts have historically been rewarded with more excellent professional reputations and better career results ([Hong & Kubik, 2003](#); [Stickel, 1992](#)) because of their potential to affect the market price (Jackson, 2005). Hilary and Hsu (2012) claim that forecast errors that are both persistent and larger in magnitude have a more substantial impact on price than stated accuracy.

A substantial body of research indicates that analysts grossly overestimate the importance of certain types of information. ([Dreman & Berry, 1995](#)) found that analysts overreact to prior-period earnings reports. Analysts underreact to prior-period return information is stated by [Ali et al. \(1992\)](#) and Lys and Sohn (1990). ([Nissani, 1994](#)) ([Boussaidi, 2013](#); [Hirshleifer, 2001](#)) In the

absence of clear information about the fundamentals of a stock portfolio, [Hirshleifer \(2001\)](#) argues that psychological biases are more likely to emerge. Any model that relies on incorrect assumptions will significantly impact companies functioning in an uncertain and information-poor environment.

### Investor Sentiment

Behavioral finance theories have sparked a long-running discussion on how stock market attitude impacts asset returns. Studies reveal that an investor's thinking influences stock pricing, portfolio construction, and financial asset management outcomes. Volatility in asset prices is a measure of investor sentiment that considers their reaction to the current market situation and their unreasonable expectations for future cash flows ([Baker & Wurgler, 2006, 2007](#)).

Due to the sentiment index's consistency and theoretical plausibility have received widespread acceptance ([Baker & Wurgler, 2006](#); [Bandopadhyaya & Jones, 2006](#); [Ben-Rephael et al., 2012](#); [Huang et al., 2015](#); [Neal & Wheatley, 1998](#); [Seok et al., 2019](#)). The disconnect between asset value and economic basis is an indicator of investor sentiment ([Zhou, 2018](#)). Government records, press stories, and market surveys are all sources of information that can be accessed. [Mushinada and Veluri \(2018\)](#) used trade volume and volatility to explore the correlation between investor sentiment and investment results.

Investor sentiment and stock return correlations have been studied extensively over the past few decades to understand and support market inefficiency or efficiency ([Brown & Cliff, 2004](#); [Huang et al., 2015](#); [Schmeling, 2009](#); [Shan & Gong, 2012](#)). [Jiang et al. \(2019\)](#) developed a new model for predicting aggregate stock market performance using the fund manager sentiment index. According to [Bu and Pi \(2014\)](#), the sentiment index can expect the Chinese stock market's returns. Individual investors should focus on reducing the risk of a market crash since irrational or noisy traders will not outpace more rational market players ([Wen et al., 2019](#)). Fund managers'

perceptions of volatility are a better determinant of performance than their actual performance, according to Gupta et al. (2019).

## Hypothesis Development

### Investor Sentiment and Information Asymmetry

Regarding asset prices and noisy traders, behavioral finance believes that they move together in a way that evolves with time (Black, 1986; [Shefrin & Statman, 1994](#); [Shiller, 1981](#)). The behavioral finance theory describes that disruptive traders desire to trade the same way other investors do. That results in stock price co-movement is due to group trading by these investors, which arbitrageurs may not be able to absorb fully ([Barberis & Thaler, 2003](#); [Pojarliev & Levich, 2011](#); Sias et al., 2016). Recent research examines and tests group transactions regarding how people feel due to the dealings ([Antoniou et al., 2016](#); [Baker & Wurgler, 2006](#); [Wang, 2020](#)).

[Brown and Cliff \(2005\)](#) assert that noisy investors' demand shocks induce long-term mispricing. [Baker and Wurgler \(2006\)](#) have a different view; they believe that all mispricing occurrences must be corrected, which results in low returns when investors have a favorable outlook. They demonstrate how this works in real life by utilizing a sentiment index monthly market-wide. This finding is supported by evaluating monthly confidence intervals for 16 developed countries ([Schmeling \(2009\)](#)). While this link is stable in existing markets, it may change in new markets or the near term. Because of how the market operates, stock returns tend to decline when there is a lot of positive sentiment. In the long run, arbitrageurs will absorb the demand shocks created by people who are not very intelligent or make a lot of noise. Overpriced assets are adjusted, resulting in lower returns. In less efficient emerging countries, trade pressure from high sentiment may endure longer, resulting in a positive short-term correlation between sentiment and realized returns.

Researchers have discovered that the trading habits of noise traders are associated

with how people feel about the market at the time of the discovery ([Brown, 1999](#)). The sentiment is an investor's general feeling about financial assets or markets that is not dependent on the flow of real-world data ([Antoniou et al., 2016](#)). When there is a lot of optimism in the market, it is more likely that noise traders will enter the market. They consider this essential information rather than just background noise ([Shen et al., 2017](#)). Mispricing of financial securities is caused by people making inaccurate assumptions about the distribution of returns on financial instruments based on recent non-fundamental information (Miwa, 2016). As a result, fewer traders make noise on the financial markets when people are wrong. Fear prevents them from taking short positions in their portfolios (Uygun & Taş, 2014).

In the literature, it has been demonstrated that investor attitude has a significant impact on how investors trade ([Garcia, 2013](#); Kurov, 2008; Tetlock, 2007) and how much money and how rapidly equities rise and fall ([Baker & Wurgler, 2006](#); [Baker et al., 2012](#); Kurov, 2008; Lee et al., 2002; [Schmeling, 2009](#); Tetlock, 2007). According to [Yu and Yuan \(2011\)](#), there are more noise traders when investors have a high confidence level. As a result, the risk of noise traders grows, and the efficiency of the markets decreases ([Brown, 1999](#); [Ilomäki & Laurila, 2018](#); [Karlsson et al., 2009](#)).

Whether or not knowledgeable traders will participate in the market is highly dependent on the level of noise trader risk, which is exacerbated by high investor sentiment. According to the notion of arbitrage restrictions, intelligent traders will be less inclined to exploit their information to their advantage ([Shleifer & Vishny, 1997](#)). [Barberis and Thaler \(2005\)](#) point out that knowledgeable traders who take positions against mispricing run the danger of the market becoming more volatile and prices deviating more from fundamental values in the long run. As a result, the risk posed by noisy traders may make it difficult for clever traders to profit from their expertise. Hence, based on the above discussion, we can hypothesize as:

**H1:** Investor sentiment is positively associated with bid-ask spread, increasing information asymmetry

### **Investor Sentiment and Analyst Forecast**

According to Krishnaswami and Subramaniam (2000) and [Black and Gilson \(1998\)](#), Analysts' earnings-per-share projections are one indicator of information asymmetry, as is the spread between estimates. Based on [Blackwell and Dubins \(1962\)](#) results, As the amount of information concerning an unknown variable becomes more widely available, people's views tend to align. According to an additional study conducted by [Elton et al. \(1984\)](#), forecast errors decrease as the fiscal year nears its conclusion. Also demonstrated is that, rather than macroeconomic difficulties, around 84 percent of observed forecast inaccuracy is related to faulty estimates of firm-specific features. One criticism leveled at this metric is that forecast errors are typically skewed in one direction or the other. One fundamental premise in studies that use these measurements is that analysts give investors objective information. But according to the findings of [Easterwood and Nutt \(1999\)](#), analysts tend to overstate favorable information while understating unfavorable information. The degree of information asymmetry as measured by forecast mistakes may, as a result, be overestimated when using forecast errors as the basis for the measurement. Another concern raised concerning forecast mistakes as a proxy for information asymmetry is the possibility that they are positively associated with the firm's riskiness in question. That means that more significant forecast error rates may be observed in some organizations simply because their earnings are more volatile than increased information asymmetry.

Anti-selection costs can be reduced by increasing analyst coverage ([Brennan and Subrahmanyam \(1995\)](#)). Even so, [Chung and Pruitt \(1994\)](#) found that expanding analyst coverage may also have a favorable impact on the amount of asymmetric information surrounding the firm. When it comes to the

value of secret knowledge, they believe that analysts are drawn to firms with more severe information asymmetry issues than at any time in the past.

In addition to providing investors with company-specific information (for example, profit predictions), financial analysts can provide investors with trading implications.

Investing in their study reduces the information asymmetry between market participants and the difference between market prices and financial asset intrinsic value. That is because there is a significant association between analyst recommendations and stock returns, as evidenced by the great majority of current studies ([Amiram et al., 2016](#); Kumar et al., 2009; Loh & Stulz, 2011). Recent behavioral finance research shows a substantial correlation between stock market performance and investor sentiment ([Baker & Wurgler, 2007](#)). We re-examine the well-known relationship between stock prices and investor sentiment (i.e., stock market reactions to analyst recommendations). To put it another way, the distribution of expert opinions and advice can impact investor sentiment in the financial markets since they directly impact investors' expectations, prudence, and behavior. We believe that the association between stock returns and analysts' recommendation announcements may be explained by investor mood.

**H2:** Investor Sentiment significantly influences errors in analyst forecasts.

### **Methodology**

All the data is numerical; therefore, this research's data type is quantitative. The information is secondary because of collection from other sources. The credibility of data is taken into account while collecting it. The population for this study is public corporations firms listed on the stock exchange of the USA. The firms that have information publicly (from Yahoo finance and stock exchange websites) are included in the sample. Moreover, the firms were merged with analyst reports on Zacks to find the analyst forecast. As a result, the selection for this study

comprises 977 firms from the years 2010 to 2018.

## Measurement of Variable

### Investor Sentiment

We measured Investor sentiment in this research using a monthly market-based sentiment index introduced by [Baker and Wurgler \(2006\)](#). First, he takes six sentiment-related indices' main components and averages them. The six metrics are NYSE turnover, dividend premium, closed-end fund discount, IPOs, first-day returns, and equity share of total new issues. Using the principal component analysis, all six measures can be reduced to their underlying components.

### Information Asymmetry

The bid-ask spread (SPREAD) is the difference between the bid and ask prices for security, and we take the approach of Venkatesh and Chiang (1986) for determination.

### Analyst Forecast

A company's analyst prediction error (Asy-Er) is the gap between expected and actual earnings per share ([Drobetz et al., 2010](#); [Fosu et al., 2016](#); Huynh et al., 2020). Mistake forecasting shows a higher level of asymmetric information, which may be seen in error forecasting. The most current forecast from each fiscal year has been used to verify that the forecast is still accurate at the end of the fiscal year. Analysts' median projection for the fiscal year under review has been adjusted for asymmetric information measures ([Drobetz et al., 2010](#); [Fosu et al., 2016](#)). It is possible to express the inaccuracy of an analyst's forecast in this way:

$$Error = \ln\left(1 + \frac{|EPS_{forecast} - EPS_{actual}|}{|median\ EPD|}\right)$$

The authors use an EPS estimate as a primary metric for estimating Asy variables for model testing. To arrive at this figure, ROE is used in conjunction with the previous year's earnings per share results and growth in EPS

(g). Retained rate of return, information asymmetry variables, and data processing generate an estimate of earnings per share.

### Control Variables

As a result, we consider parameters such as firm size, MBV, ROA, leverage, FCF, and R&D expenditures not included in the hypothesis (R&D). A company's size is determined by the natural logarithm of total assets divided by employees ([Fosu et al., 2016](#); Maury & Pajuste, 2005). Maury and Pajuste (2005) claim that an enterprise's market value decreases with size and maturity. In this case, a negative association between company size and value is expected.

### Econometric Specification

$$IA_{it} = \beta_1 + \beta_2 SENT_t + \beta_3 SIZE_{it} + \beta_4 MBV_{it} + \beta_5 ROA_{it} + \beta_6 LEV_{it} + \beta_7 FCF_{it} + \beta_8 R\&D_{it} + \varepsilon_{it}$$

$$ERROR_{it} = \beta_1 + \beta_2 SENT_t + \beta_3 SIZE_{it} + \beta_4 MBV_{it} + \beta_5 ROA_{it} + \beta_6 LEV_{it} + \beta_7 FCF_{it} + \beta_8 R\&D_{it} + \varepsilon_{it}$$

## Results and Analysis

### Descriptive Statistics

In the descriptive statistics table, the statistical description of more than eight thousand observations is given. This table presents the mean values of each variable, and their standard deviation, along with their minimum and maximum values. The mean value of bid-ask spread, which measures the level of information asymmetry, is 4.7514 with a standard deviation of 9.0807. The maximum value is 428.4, and the minimum value is -23.714. The mean value of analyst forecast error is 50.837170 with a standard deviation of 90.0769, while its maximum value is 1930.498 and the minimum value is -0.0000153. The primary explanatory variable of this study is investor sentiment, with a mean of -0.09248 and a standard deviation of 0.2004. Moreover, the values of various control variables are presented below.

Table 1

Variable	Obs	Mean	Std. Dev.	Min	Max
Spread	8991	4.751405	9.080799	-23.715	428.4
Error	8361	50.83717	90.0769	1.53E-05	1930.498
Sent	8991	-0.09248	0.200392	-0.58513	0.164055
size	8991	7.882795	1.791309	2.72942	12.4916
Mbv	8991	1.310769	1.625219	0	23.0518
Roa	8977	0.094676	0.190678	-10.373	1.314
Lev	8980	2.662158	128.3925	-9243.9	6065.1
Fcf	8351	-0.00873	17.94353	-1113.2	1.041
R&D	8983	1.271534	41.6597	0	2756.83

### Correlation Analysis

The study's correlation coefficients are shown in the table below. It is revealed by the findings that there is a positive relationship between investor sentiment (SENT), analyst forecast error (ERROR), and information

asymmetry (SPREAD). It shows that the bid-ask spread increases with the increase in investor sentiment; moreover, the errors in analyst forecast also increase with the positive change in the investor sentiment. The correlation analysis also presents the degree of co-movement among control variables.

Table 2

	Spread	Error	Sent	Size	Mbv	Roa	Lev	Fcf	R&d
Spread	1								
Error	0.0433	1							
Sent	0.0282	0.0765	1						
Size	0.1457	0.1923	0.0292	1					
Mbv	0.2136	0.0519	-0.0054	-0.2963	1				
Roa	0.1371	0.1353	0.0049	-0.1178	0.4277	1			
Lev	-0.0258	0.0048	0.0077	-0.0208	-0.0042	-0.0018	1		
Fcf	0.0116	0.0138	-0.0032	0.0474	-0.0265	0.0583	0.0006	1	
R&d	-0.0049	-0.0204	0.0002	-0.0869	0.1266	-0.2388	-0.0016	-0.0369	1

### Investor Sentiment and Information Asymmetry

Hence, based on the diagnostic test, Fixed Effect model is employed to estimate the results.

Table 3

Fixed-effects (within) regression	Observations =	7774			
Group variable: id	Groups =	977			
R-sq: within = 0.0218	Group Observation: min =	1			
Between = 0.1155	Average =	9			
Overall = 0.0168	Maximum =	9			
F(7,6790) = -0.7330					
Prob >F = 0.0000					
Spread	Coef.	Std. Err.	Z	P>z	[95% conf. Interval]
Sent	0.965791	0.398414	2.42	0.015	0.184913 1.746668
Size	1.838926	0.101803	18.06	0.000	1.639396 2.038455
Mbv	1.542599	0.096267	16.02	0.000	1.35392 1.731279
Roa	3.968592	1.233028	3.22	0.001	1.551901 6.385282
Lev	-0.00102	0.00064	-1.59	0.112	-0.00227 0.000238
Fcf	0.000875	0.005063	0.17	0.863	-0.00905 0.010797
R&d	0.068089	0.201613	0.34	0.736	-0.32707 0.463244

Fixed-effects (within) regression				Observations	=	7774
Constant	-12.1121	0.875969	-13.83	0	-13.8289	-10.3952

As shown in table 5.3, investor sentiment (SENT) positively impacts the bid-ask spread—the bid-ask spread changes by 0.9657 units for every unit change in investor sentiment. As a result, we accept hypothesis 1,

that investor sentiment influences information asymmetry. The results also show that firm-level factors like size (SIZE), MBV, and profitability (ROA) positively impact the bid-ask spread.

## Investor Sentiment and Analyst Forecast

Table 4.

Fixed-effects (within) Regression				Observations = 7774		
Group variable: id				Groups = 977		
R-sq: within = 0.0218				Group Observation: min = 1		
Between = 0.1155				Average = 9		
Overall = 0.0168				Maximum = 9		
F(7,6790) = -0.7330						
Prob >F = 0.0000						
Error	Coef.	Std. Err.	Z	P>z	[95% Conf.	Interval]
Sent	39.75053	4.800626	8.28	0.0000	30.3398	49.16126
Size	-22.3323	2.990778	-7.47	0.000	-28.1952	-16.4694
Mbv	-1.06334	1.42921	-0.74	0.457	-3.86504	1.738363
Roa	104.2806	17.35445	6.01	0.000	70.26044	138.3008
Lev	0.000816	0.00748	0.11	0.913	-0.01385	0.015479
Fcf	0.030917	0.069071	0.45	0.654	-0.10448	0.166318
R&d	5.128427	5.56707	0.92	0.357	-5.78478	16.04163
Constant	224.9522	24.41704	9.21	0	177.0871	272.8172

As shown in table 5.4, investor sentiment (SENT) positively impacts analyst forecast error. It shows that one unit change in the investor sentiment metric caused a 39.75% change in the analyst forecast errors (ERROR). That leads us to accept hypothesis 2 that investor sentiment influences the analyst valuations and estimates. The results also show that firm-level variables like size (SIZE) and profitability (ROA) have a positive impact on the analyst forecast error (ERROR).

## Discussion

This research aims to find out if there is a connection between investors' emotions and the estimates and recommendations of financial professionals. There is a tendency for analysts to overestimate when there is a lot of investor enthusiasm (Walther & Willis, 2013). A company's value can be difficult to estimate when it has a large quantity of negative profit

growth and evaluating its worth (Hribar & McInnis, 2012; Qiang & Shu-e, 2009). According to Ke and Yu (2020), analysts' ability to transform their earnings estimates into stock recommendations is evaluated by how successfully they do so in their stock recommendations. A challenging situation for analysts is when many investors have an unfavorable view of a company.

We feel that the prior findings are partly due to analysts not exerting themselves as hard when positive investor sentiment. As a result, they are unable to collect as much personal data. Study participants in a good mood (i.e., have a high degree of sentiment) are more likely to rely on heuristics and stereotypes to make quick decisions than those in a negative attitude (i.e., have a low level of sentiment). Before making a decision, those in a foul mood (i.e., have a low level of sentiment) need to conduct extensive study and processing (Bodenhause et al., 1994; Park & Banaji,

2000). Feeling happy can influence the way people search for and assess information in a wide range of settings. It has been found that people are more prone to pass judgment on others when they feel well inside ([Bodenhausen et al., 1994](#)). In the future, investors are less likely to question management disclosures if they have a favorable impression of the company. According to the authors' premise, according to Brown et al., managers are more likely to report pro forma results above GAAP earnings when investor confidence in the company is high. Investor sentiment also influences managers (Hurwitz (2018). Positive (negative) investors' attitudes can significantly impact management's outlook, which is especially true for organizations that face a high degree of uncertainty.

Knowledge gained through hands-on experience is more easily assimilated (Hirshleifer, 2001). The learning effect is believed to help analysts become more successful at processing the information as their knowledge and forecasting abilities develop when they repeatedly do the same activity, such as projecting earnings. Several studies have demonstrated that analysts with extensive, firm- or task-specific knowledge are better at providing accurate estimates and recommendations.

Analysts that have a lot of experience in forecasting are more likely to include extra publically accessible data into their projections (Mikhail et al., 2003), modify their estimates later in the fiscal quarter (Kim et al., 2011), and make bolder predictions ([Clement & Tse, 2005](#)). When it comes to long-term forecasts, analysts with more excellent expertise are more likely to be correct (Brown & Mohd, 2003; [Clement et al., 2007](#); Mikhail et al., 1997, 2003). As a result, the market attracts the attention of analysts with more experience and more accurate forecasts and stock recommendations, which in turn inspire more

people to purchase and sell stocks (Mikhail et al., 1997). With more experience in estimating earnings, analysts are better equipped to turn their estimates into stock recommendations than those with less experience ([Bagnoli et al., 2009](#)).

## **Conclusion**

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In this study, the role of investor sentiment was investigated on the level of information dynamics of stocks of public listed firms in the USA. The study found significant evidence that investor sentiment plays a vital role in determining stock prices and analyst recommendations. The investor's optimism and pessimism influence the market microstructure. Moreover, the results also present the notion that sentiments and behaviors affect the stock market trading activities and analyst recommendations.

Our findings add to the corpus of knowledge in this area by throwing light on one-way the investor mood impacts analysts' profit projections. Academics can utilize this data to analyze market sentiment better and estimate better. Our findings can help reduce the impact of investor sentiment on analyst forecasts and recommendations. Our results can help you determine whether experts' projections and suggestions are more reliable during periods of elevated market sentiment.

As a result of our research, we've identified several potential avenues for further exploration. An excellent place to start would be to look at the impact of other forecasting traits like accuracy and optimism, stock returns, and trading activity on investor mood and analyst private information generation. A second advantage of using data from stock markets outside the United States is that future studies can confirm our findings and build on them. Analysts' profit projections may be affected by investor mood, which can be determined by analyzing market sentiment.

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