



**Unraveling the Enigmatic Interplay: Options Market Activity, Investor Mood Spectrums, and Stock Return Volatility Intricacies**  
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*Accepted March 2024*

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**ABSTRACT**

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This study examines S&P 500 firms from 2008 to 2018 and uncovers a complex, non-linear relationship between the options market call-put ratio and investor sentiment that challenges assumptions of linearity. The link between options trading and underlying volatility appears disrupted during moderate pessimism but reemerges forcefully amid extreme negative sentiment. This suggests limits to arbitrage and information opacity enable sentiment transmission into prices. Notably, firm size moderates this relation, with larger firms partially insulated from sentiment-driven volatility extremes. Our findings challenge paradigms of simplistic sentiment-volatility connections, indicating the strength of such links depends on the sentiment regime, firm characteristics, and investor composition. Options market signals require carefully disentangling the prevalent investor mood and firm-specific informational frictions to interpret properly. Finally, this study enhances understanding of the intricate dynamics through which investor sentiment manifests in volatility dynamics.

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*Keywords: Investor sentiment, Open interest, Price volatility, Information transparency*

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