Faculti Summary
https://faculti.net/default-risk-and-option-returns/

This video video discusses significant growth in the US equity options market over the past five years, particularly among retail investors, due in part to the availability of zero-commission trading platforms. The author aims to investigate the expected returns of holding options and the risk factors influencing these returns, noting a gap in existing research regarding the risk-based determinants of option returns.

Early studies highlighted the relationship between options pricing and default risk, but there remains limited understanding of how default risk affects option returns. The author proposes a theoretical model—a compound option model with jump risk—to analyze these relationships, emphasizing “delta hedged” option returns, which isolate the return primarily influenced by volatility rather than the underlying stock's price movements.

Key findings from the theoretical model indicate that higher leverage and asset variance lead to lower expected returns on delta hedged options. Empirical testing using data from 1996 to 2016 supports these findings, revealing a negative correlation between default risk and delta hedged option returns. Results from both cross-sectional and time series analyses confirm that as default risk increases, option returns tend to decrease, and this trend is consistent around credit rating changes.

The findings also connect default risk with various anomalies in the options market, suggesting that these anomalies may be better understood in the context of default risk. Overall, investors seem willing to pay a premium for options in high-default-risk firms, accepting lower expected returns in exchange for the hedging benefits against volatility and default risk. Ultimately, the research enhances understanding of the determinants of equity option returns, highlighting the critical role of firm-level risks.