

The effect of changes in margin requirements on option trading efficiency

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Abstract

Margin requirements on option trading are designed to control the default risk inherent to commitments undertaken by option traders. Much like similar institutions worldwide, the Tel Aviv Stock Exchange (TASE) adopted the Standard Portfolio Analysis of Risk (SPAN) method, which sets the required level of option margins according to the most pessimistic of 16 scenarios. SPAN is calculated at least daily. Seeking to improve the precision of its calculated margin requirements, the TASE switched in July 2001 to a more detailed margin system based on 44 scenarios. In contrast to other studies that examined the effect of margins on option trading, the data in this study allow us to examine, by analyzing this unique event, the impact of improved accuracy in setting margin requirements on option trading efficiency. Main findings are: (1) Using the 44-scenario method, margin requirements on average were increased. (2) Fluctuation of share prices, measured by implied standard deviation, declined. (3) Although there was no change in trading volumes or buy-sell spreads, the new calculation method had a positive impact on option trading efficiency on the TASE, which was reflected in a significant reduction in deviations from put-call parity and skewness of the standard deviation.

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