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Early exercise of American put options: Investor rationality on the Swedish equity options market

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Abstract

Using Swedish equity option data, this study investigates how well the actual exercise behavior of American put options corresponds to the early exercise rules. The optimal exercise strategy is established in two ways. First, the critical exercise price, above which a put option should be exercised early, is computed and compared to the actual exercise price. Second, the exercise value of the option is compared to its market bid price. The results show that most early exercise decisions conform to rational exercise behavior, even though a large number of failures to exercise are found. Most of the faulty exercises can also be discarded after a sensitivity analysis, although several failures to exercise are considered irrational, even after taking transaction costs into account. © 2000 John Wiley & Sons, Inc. Jrl Fut Mark 20:167–188, 2000

BIBLIOGRAPHY

Barone-Adesi, G., & Whaley, R. (1987). Efficient analytic approximation of American option values. *Journal of Finance*, **42**, 301–320.

Web of Science® | Google Scholar

Blomeyer, E. (1986). An analytical approximation for the American put price for options on stocks with dividends. *Journal of Financial and Quantitative Analysis*, **21**, 229–233.

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Web of Science® | Google Scholar

Carr, P. & Faguet, D. (1994). Fast accurate valuation of American options. Working paper, Cornell University, USA.

Google Scholar

Cox, J., Ross, S., & Rubinstein, M. (1979). Option pricing: A simplified approach. *Journal of Financial Economics*, **13**, 145–166.

Google Scholar

Diz, F., & Finucane, T. (1993). The rationality of early exercise decisions: Evidence from the S&P 100 index options market. *Review of Financial Studies*, **6**, 765–798.

Web of Science® | Google Scholar

Engström, M., Nordén, L., & Strömberg, A. (1997). Early exercise of American equity options: A study of the exercise pattern at the Swedish options market. Working paper, Stockholm University.

Google Scholar

Finucane, T. (1997). An empirical analysis of common stock call exercise: A note. *Journal of Banking and Finance*, **21**, 563–571.

Web of Science® | Google Scholar

Gay, G., Kolb, R., & Yung, K. (1989). Trader rationality in the exercise of futures options. *Journal of Financial Economics*, **23**, 339–361.

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Geske, R. (1979). A note on an analytical formula for unprotected American call options on stocks with known dividends. *Journal of Financial Economics*, **7**, 375–380.

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Johnson, H. (1983). An analytical approximation for the American put price. *Journal of Financial and Quantitative Analysis*, **18**, 141–148.

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MacMillan, L. (1986). Analytic approximation for the American put option. *Advances in Futures and Options Research*, **1**, 119–139.

Google Scholar

McMurray, L., & Yadav, P. (1993). The early exercise premium in American option prices: Direct empirical evidence. Paper presented at the European Finance Association 1993 annual meeting.

Google Scholar

Overdahl, J., & Martin, P. (1994). The exercise of equity options: Theory and empirical tests. *Journal of Derivatives*, **2**, 38–51.

Google Scholar

Roll, R. (1977). An analytical valuation formula for unprotected American options on stocks with known dividends. *Journal of Financial Economics*, **5**, 251–258.

Web of Science® | Google Scholar

Whaley, R. (1981). On the valuation of American call options on stocks with known dividends. *Journal of Financial Economics*, **9**, 207–211.

Web of Science® | Google Scholar

Zivney, T. (1991). The value of early exercise in option prices: An empirical investigation. *Journal of Financial and Quantitative Analysis*, **26**, 129–138.

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