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Valuation of Callable Warrants

Published: January 1997

Volume 8, pages 5–18, (1997) Cite this article



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Abstract

A simple valuation model for callable warrants is derived and tested. The model is expressed in closed form except for one term which can be evaluated numerically. Predictions of 78 warrant prices are compared to market prices and the average error is -.224 percent. By contrast, the Black-Scholes model applied to the same warrants produces an average error of 31.44 percent. Thus the callability feature cannot safely be ignored in determining warrant values.

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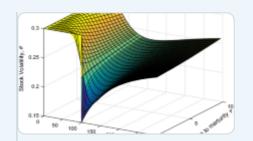
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<u>Black-scholes approximation</u> <u>Developing and Measuring the</u> <u>of warrant prices: slight return</u> <u>Concept of Warranty Premium</u>

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References

Black, F., "Fact and Fantasy in the Use of Options." *Financial Analysts Journal* 31, 36-41, 61-72, (1975).

Google Scholar

Black, F., and M. Scholes, "The Pricing of Options and Corporate Liabilities." *Journal of Political Economy* 81, 399–418, (1973).

Google Scholar

Brennan, M., and E. Schwartz, "Convertible Bonds: Valuation and Optimal Strategies for Call and Conversion." *Journal of Finance* 32, 1699–1715, (1977).

Google Scholar

Chen, A., "A Model of Warrant Pricing in a Dynamic Market, #x201D; *Journal of Finance* 25, 1041–1060, (1975).

Google Scholar

Constantinides, G., "Warrant Exercise and Bond Conversion in Competitive Markets." *Journal of Financial Economics* 13, 371–397, (1984).

Google Scholar

Cox, D., and H. Miller, *The Theory of Stochastic Processes*. New York, NY: John Wiley and Sons, Inc., 1965.

Google Scholar

Cox, J., and S. Ross, "The Valuation of Options for Alternative Stochastic Processes." *Journal of Financial Economics* 3, 145–166, (1976).

Google Scholar

Efron, B., "Bootstrap Methods: Another Look at the Jackknife." *Annals of Statistics* 7, 1–26, (1979).

Google Scholar

Emanuel, D., "Warrant Valuation and Exercise Strategy." *Journal of Financial Economics* 12, 211–235, (1983).

Google Scholar

Ferri, M., S. Moore, and D. Schirm, "Investor Expectations About Callable Warrants." *Journal of Portfolio Management* 14, 84–87, (1988).

Google Scholar

Galai, D., "A Note on Equilibrium Warrant Pricing Models and Accounting for Executive Stock Options." *Journal of Accounting Research* 27, 313–315, (1989).

Google Scholar

Galai, D., and M. Schneller, "Pricing Warrants and the Value of the Firm." *Journal of Finance* 33, 1339–1342, (1978).

Google Scholar

Ingersoll, J., "A Contingent Claims Valuation of Convertible Securities." *Journal of Financial Economics* 4, 289–322, (1977).

Google Scholar

Ingersoll, J., *Theory of Financial Decision Making*. Totowa, NJ: Rowman and Littlefield, 1987.

Google Scholar

Kremer, J., and R. Roenfeldt, "Warrant Pricing: Jump-Diffusion vs. Black-Scholes." *Journal of Financial and Quantitative Analysis* 28, 255–272, (1993).

Google Scholar

Lauterbach, B., and P. Schultz, "Pricing Warrants: An Empirical Study of the Black-Scholes Model and Its Alternatives." *Journal of Finance* 45, 1181–1209, (1990).

Google Scholar

Leonard, D., and M. Solt, "On Using the Black-Scholes Model to Value Warrants." *Journal of Financial Research* 13, 81–92, (1990).

Google Scholar

Merton, R., "The Theory of Rational Option Pricing." *Bell Journal of Economics and Management Science* 4, 141–183, (1973).

Google Scholar

Merton, R., "On the Pricing of Corporate Debt: The Risk Structure of Interest Rates." *Journal of Finance* 29, 449–470, (1974). *Moody's Industrial Manual*. New York, NY: Moody's Investor Service, (Various years).

Google Scholar

Noreen, E., and M. Wolfson, "Equilibrium Warrant Pricing Models and Accounting for Executive Stock Options." *Journal of Accounting Research* 19, 384–398, (1981).

Google Scholar

Schultz, P., "Calls of Warrants: Timing and Market Reaction." *Journal of Finance* 48, 681–696, (1993).

Google Scholar

Schwartz, E., "The Valuation of Warrants: Implementing a New Approach." *Journal of Financial Economics* 4, 79–93, (1977).

Google Scholar

Sinkey, J., and J. Miles, "The Use of Warrants in the Bail out of First Pennsylvania Bank: An Application of Option Pricing." *Financial Management* 11, 27–32, (1982).

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About this article

Cite this article

Burney, R.B., Moore, W.T. Valuation of Callable Warrants. *Review of Quantitative Finance and Accounting* **8**, 5–18 (1997). https://doi.org/10.1023/A:1008225302836

Issue Date

January 1997

DOI

https://doi.org/10.1023/A:1008225302836

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