Are convertible bonds underpriced? : an analysis of the French market

We investigate the pricing of convertible bonds on the French convertible bond market using daily market prices for a period of 18 months. Instead of a firm-value model as used in previous studies, we use a stock-based binomial-tree model with exogenous credit risk that accounts for all important convertible bond specifications and is therefore well suited for pricing convertible bonds. The empirical analysis shows that the theoretical values for the analyzed convertible bonds are on average more than 3% higher than the observed market prices. This result applies to both the standard convertibles and the exchangeable bonds in our sample. The difference between market and model prices is greater for out-of-the-money convertibles than for at- or in-the-money convertibles. A partition of the sample according to maturity indicates that there is a positive relationship between underpricing and maturity with decreasing mispricing for bonds with shorter time to maturity. (C) 2002 Elsevier Science B.V. All rights reserved.