Editorial

In recent years, there have been attempts to hedge employees' stock options by financial institutions. Rumours abound that this hedging has been less than perfect and that losses have resulted. My editorial cannot assess the truth of these rumours; I shall confine my comments to the relevant derivative theory, to see if this sheds any light on the issue.

The relevant theory is that of warrant pricing. This is complicated because the exercise of the warrant changes the capital structure of the firm, just as the exercise of an employee stock option affects the stock levels. The theory has been developed for the case of a company with equity, debt and a single issuance equity warrant.

Attempts to extend the theory to multiple

equity warrants lead to enormous complications in the theory, and approximations of the Black-Scholes variety will probably not lead to good results. Add to this a more realistic capital structure with multiple corporate bonds, various other instruments, convertibles, preferentials etc and we can see there is enormous scope for analytical mismeasurement.

I accept that things that may be difficult to calculate may not automatically be difficult to hedge, however it seems a useful indicator of likely problems to come.

Stephen E. Satchell

Editor

November 2005