Barrier options are European put or call options where the payoff is dependent on whether the price of the underlying asset reaches a special predetermined level (called barrier) during the life of the option. We show how barrier options can be valued and hedged using standard put and call options on the same underlying asset. Our hedging procedure considers a special feature of the implied volatilities called the smile effect. We give an example where we apply our results to the hedging of down-and-out call options on the DAX with standard options traded at the DTB in Frankfurt.
Nein

Peer reviewed: Nein
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commissioned: not commissioned
Professional Journal: Nein

Occurences:
· Einrichtungen > Fakultäten > Fakultät für Mathematik > Zentrum Mathematik > M13 Lehrstuhl für Finanzmathematik (Prof. Zagst) > Journal Papers
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entries: