# A Risk-Minimizing Approach to Static Hedging of Barrier Options

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An important issue for banks and other financial institutions is control risks by trading some appropriate financial instruments: so called "hedging". Typically, the traders at the bank buy and sell liquid European call- and put options in order to match the payoff from a more exotic or complicated contract, for example a barrier option. Previous techniques to design statical hedges (i.e. buy-and-hold strategies) depend heavily on restrictive assumptions on the model of the underlying process. We present a new, risk-minimizing framework for hedging European style contingent claims and try it out on up-and-out call options. The proposed technique assumes nothing of the model except the possibility to simulate trajectories (a mild restriction in practice), and is easy to understand and implement.