Minisymposium 5 - Finanznumerik (Computational Finance)

Amortizing Forward: An Alternative Contract For Hedging Currency Risk

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With a classical forward contract investors protect their position against unfavorable developments of the currency in foreign exchange markets. In doing so, they are hedging market risk, while at the same time are – often regretted – giving up all chances of an enhanced performance should the market move in their favor. A contract that offers an opportunity to participate in the latter case is the Amortizing Forward introduced here. It provides the investor with a currency rate that protects his position, but enables a reduced liability.
The contract comprises an upper level K above which the notional amount is lowered (amortized) stepwise, and an upper barrier B, which terminates the Amortizing Forward entirely if triggered. An analytic solution is found for a simple case and it is demonstrated why for others only numerical methods can be considered. An unexpected result is exhibited by the fact that the barrier does not diminish but increase the value of the contract. This stands in contrast to the classical barrier-options, where the barrier is intended to reduce cost.