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We propose a convex regularization of the nonlinear inverse problems applied to the identification of a local volatility surfaces $\sigma(t, S)$ in the Black-Scholes equation from market prices of European Vanilla call options. This is accomplished making use the Dupire equation. Based on the properties of the parameter-to-solution mapping, which assigns option prices to given volatilities, we show stability and convergence of the regularized solutions in terms of Bregman distance with respect to a convex stabilization functional f . Convergence rates in the literature are improved and the source-wise condition is obtained. The convexity of the regularization functional f are connected with convex risk measures. (Received February 12, 2008)